

Number 15
America in 1492
Selected Lectures from the Quincentenary Program
The Newberry Library

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Introduction

by
Frederick E. Hoxie

Now that the parades and protests are over, 1992 is about to slip into history. Scholars and museum directors can retreat to their studies and offices, licking their wounds and counting their victories. In the coming years participants in the quincentennial commemorations that unfolded across the globe can tell of their efforts to tell accurately the story of Europe's first encounter with America. It will be left to them and their friends to evaluate the significance of their contributions to public education and civil discourse.

Happily, the turn of the year will not leave us alone with the veterans of recent controversies and their oral recollections. Despite the quantity of talk and posturing during the quincentennial, many institutions and organizations have made their contributions in print. The Newberry's principal effort, America in 1492, will remain in print at Alfred A. Knopf, Inc. and will be transformed into a Viking paperback by the end of 1993. We hope it will have a long shelf life. Other products of the year, such as Kirkpatrick Sale's The Conquest of Paradise, several new biographies of Columbus, and special issues of several scholarly journals, will also remain for future students to examine and evaluate. These will probably be more valuable than any seminar or oration.

These thoughts make introducing this Occasional Paper a particularly poignant experience. The papers included in this volume were originally presented as lectures accompanying the Newberry's exhibition, "America in 1492," which was on display from January 18 to April 18, 1992. "America in 1492" did not please everyone, but from the opening ceremonies when Peter Garcia and Carpio Trujillo blessed the galleries to the accompaniment of a specially-made Cochiti drum, to the final days of school tours and teacher workshops, it was a source of immense pride. Visitors appreciated the effort to create a portrait of the Americas on the eve of the Columbus voyages and to communicate that picture to a general audience. They thrilled to the treasures on display and responded to the exhibit's beautiful design. And then it was gone. The books returned to their vault, the artifacts travelled back to the Field Museum of Natural History, and the visitors went on to other curiosities.

On the first Saturday after the opening of the exhibition, William Swagerty, the curator of the show, was scheduled to deliver the opening lecture in an eight-week series to an audience of the general public. Three inches of snow covered the city that morning and all who arrived to set up the room assumed Swagerty would be speaking to two dozen hardy friends. When the doors opened, however, nearly three hundred people filed in to hear him. The pace did not slacken for the remainder of the series. The turnout proved our (nervous) prediction that the exhibition viewers would be eager to learn more about American culture in 1492. Moreover

the audience's response showed that scholars and lay people could share a common language and interest.

Swagerty's lecture is reprinted here, along with the edited texts of successive presentations by Jay Miller, Francis Jennings, Sam Gill, Dean Snow, Alan Kolata, Clara Sue Kidwell and Charlotte Heth. They preserve for teachers and students not only the excitement of the "America in 1492" exhibition, but the central ideas that informed its organization and design. Together with the exhibition catalogue, they communicate a permanent sense of what the show had to teach. We hope these materials will be used in classrooms and that they might inspire new projects and new research. There is no reason to wait another century for the excitement of 1992 to return.

America in 1492,
the Curator's Perspective

by
William R. Swagerty

Context of the Quincentenary

Upon returning to Europe after his initial reconnaissance of islands he thought to be part of Cipango, or Japan, Columbus penned a letter to Queen Isabella and King Ferdinand to announce his "discoveries," successes, and prospects for the crown. Dated Lisbon, March 14, 1493, the "Columbus Letter" contained many passages since quoted many times. One seldom repeated section contains his explanation for capturing Taíno-speakers somewhere in the Bahama Islands. That passage, translated from Latin, is worth reconsideration:

On my arrival at that sea, I had taken some Indians by force from the first island that I came to, in order that they might learn our language, and communicate to us what they knew respecting the country; which plan succeeded excellently, and was a great advantage to us, for in a short time, either by gestures and signs, or by words, we were enabled to understand each other. These men are still travelling with me, and although they have been with us now a long time, they continue to entertain the idea that I have descended from heaven; and on our arrival at any new place they published this, crying

out immediately with a loud voice to the other Indians, "Come, come and look upon beings of a celestial race": upon which both women and men, children and adults, young men and old, when they got rid of the fear they at first entertained, would come out in throngs, crowding the roads to see us, some bringing food, others drink, with astonishing affection and kindness.¹

I have often wondered, as have others who have read these same lines, what the Tainos truly said among themselves before and after some of their people were captured and forcibly taken aboard European ships to be used as translators and to be shown on parade as "curiosities" from the Indies. Did they, as Columbus claimed, conceptualize the Europeans and their ships as "celestial beings" or were Spaniards, Basque, and Italian sailors perceived as other tribes of peoples who had come to trade, plunder, and conquer their homelands? The Taíno view of events, as well as those of the common sailors and other officers on Columbus's three ships are lost forever; no accounts other than Columbus's "Letter" and a transcription of a copy of his logbook survived--at least not on paper.

Five hundred years later, the world of Christopher Columbus, the story of his four voyages, and the cultural milieu reflected in his enigmatic life and travels might be thought of as a series of views through a kaleidoscope of ever-changing shapes and colors. Until quite recently, although the patterns had changed, the focal

point remained Columbus the man, Iberian expansion, and forces driving Renaissance Europe into the four quarters of the world.² Indeed, had we been present in Chicago during the 1893 World Columbian Exposition, we would have witnessed and might possibly have participated in the celebration of four hundred years of European "progress" in colonizing and displacing indigenous peoples throughout the world.³ A century later, those who continue to champion the European accomplishment are much more sensitive to the impact wrought by the invasion of the Americas, Africa, and Oceania by European nation states. Writing in 1990, the late J. B. Harley, curator of the exhibition, "Maps and the Columbian Encounter" observed:

As we approach the 500th anniversary . . . of Columbus's first voyage, historians are thinking differently about the events of 1492. The search has turned increasingly to the meaning of the phrase, "discovering America" rather than to locating the actual landfalls of the navigators History is more complex and less confident than it was in 1892. Instead of just a European history we are now writing an ethnohistory. Instead of a one-way discovery we now find a two-sided encounter. Instead of a European gift to the New World we now document an exchange. Instead of heroes of conquest we now consider the victims. Instead of great events we now ponder the processes of everyday life. Instead of just an expanding frontier we now measure its ecological consequences. Instead

of the all-powerful nation state we now accept the great diversity of cultures that constantly redefine the American experience.⁴

Harley's exhibition, as well as many others including the Florida State Museum's "First Encounters: Spanish Explorations in the Caribbean and the United States, 1492-1570," the National Portrait Gallery's "Circa 1492" and the Smithsonian Institution's "Seeds of Change: Five Hundred Years Since Columbus" have helped turn our focus toward the Americas during the Quincentenary; but even these major efforts, while providing long-overdue balance, continue to bear the stamp of a Eurocentric discussion explaining why Judeo-Christian and Arabic traditions predictably culminated in fifteenth century voyages of discovery in many parts of the world.⁵ And while explaining important aspects of the meeting of the two hemispheres through processes now recognized as part of the long term Columbian exchanges, none of these efforts to interpret the "meaning" of discovery significantly shifts our minds and our sights toward the Western Hemisphere.

A quick glance at recent issues of National Geographic or any 1492 section in popular or academic bookstores is a lesson in how we continue to fixate our attention on the Niña, the Pinta, and the Santa María much more than the Taíno and their neighbors in the Americas.⁶ Because of the continued dominance of "Western" civilizations and the weight of coverage in the popular media of print and on video focusing on the story of European overseas

expansion, the Quincentenary, like its predecessor a century ago, continues to promote a circus-like atmosphere with the European expansion in the big tent; Columbus and his generation of conquistadores in the center ring; and American Indians, joined by a few Africans and Asians, still on parade. Despite good intentions, many of the Congressionally-funded projects associated with Quincentenary productions and special programs have done little to correct negative stereotypes of the Americas before the European invasion.'

It is therefore understandable when American Indians such as Suzan Shown Harjo make public announcements that they will not be celebrating Columbus Day in light of 500 years of colonialism. Unlike Harjo, who has written that "it would be great to fast-forward to 1993, which the United Nations has declared the 'Year of Indigenous Peoples' . . .", many scholars, including myself, think that tackling 1992 head on with reflection and reevaluation of consensus view interpretations is the better approach.

Those who share my view, including Spanish historian Manuel Lucena Salmoral,⁹ suggest that a different way of commemorating the Quincentenary is possible; one that celebrates the Native American achievement before widespread European colonization; a story that does not remove the pain of European domination for Native peoples, but one that places American civilizations in the limelight independent of the contact experience. Using the research tools available in a library such as The Newberry, our scholarly amp submits that a different multi-textured vision, and one equally

colorful and complex, emerges when we shift our view of the horizon from the shores of Spain, Portugal, and Italy to the coastlines of the Americas during the time before European colonization. That, in a nutshell, is the story behind "America in 1492" at The Newberry Library.

The exhibition, "America in 1492" was conceived, developed, and mounted as an attempt to interpret the Americas before widespread European influences. It is foremost a commemoration of the richness of the Native American heritage, of which all of us--Indian and non-Indian alike--benefit. It is also an interpretation of the social fabric and the material cultural life of American civilizations. Unlike Columbus, we make no claims to speaking for Indians in the exhibition. Instead, our goal from the outset has been to select books, manuscripts, works of art from the permanent collections of The Newberry and objects made by Native Americans, that demonstrate visually and contextually two major themes to the viewer: our first concern has been to impart the diversity of Indian societies in the Americas at the time of the Columbian encounters; our second, related purpose has been to show the complexity of the cultural landscape from the Arctic Circle to the Straits of Magellan.

To accomplish these interrelated goals, we admit to leading viewers and readers down a heavily analyzed textual path in both the exhibition itself and the accompanying publications, America in 1492--the book; and America in 1492--the catalogue.¹⁰ Unlike many art exhibitions, we have chosen few items that convey meaning

by themselves. Instead, we have assembled printed materials, works of art, and objects that reflect the breadth of social and environmental complexities in the Americas. Through these pictures, texts, and objects from the Field Museum of Natural History, we think that we have made an important statement from this hemisphere of the meaning of some of the shapes, textures, and colors mirrored at the end of the long kaleidoscope distancing the viewer in 1992 from the reality of the Americas circa 1492.

Much of that "reality" is lost forever. We do not pretend to portray what life was like for all Native Americans circa 1492. That year has served as a metaphor throughout this project. For some cultures, 1492 is an appropriate dividing point between the time before and the time after European entry into the Americas. For most, a benchmark at a later date, in some cases two or more centuries beyond Columbus, more accurately separates pre- and post-contact eras.

Nor do we pretend to know what all Native societies thought about each other or their cosmography and physical or spiritual relationship with other peoples speaking different languages. After all, there was no "America;" no Western Hemisphere; no division into scientific "culture area" until Europeans labeled and divided these homelands into these geographic units--for their own convenience and understanding.

"America in 1492" is thus primarily about native ways of life; but it is also an explanation of the Europeans and their progeny in the Americas who left us a legacy on paper and on canvas about

the peoples with whom they interacted and sometimes came to displace, assimilate, or live beside during the centuries since the initial Columbian encounter.

In the book, in the catalogue, and in the exhibition itself, we attempted to select visual images that provide a realistic view of Indian societies before contact with Europeans. A separate literature and an equally revealing body of visual images in circulation as early as 1493 convey a different story--that of the myths and stereotypes held by Europeans of native societies throughout the Western Hemisphere. This project does not treat that subject. Instead, we invite readers and viewers to share the world of Indian America as we think it really might have been before European material, biological, and ideological introductions.

History of the Project

The trail that culminated in the Grand Opening of the exhibition on January 18 with simultaneous release of the catalogue and the book, America in 1492, was first blazed in 1983 when Fred Hoxie, the Director of the D'Arcy McNickle Center for the History of the American Indian at The Newberry, began discussions with Alvin Josephy about producing a book as a Quincentenary project. That project became a reality once Alfred A. Knopf of New York agreed to publish an anthology of freshly written chapters by theme and by region on the Americas in 1492. this is a book intended for a general audience with 150 illustrations, mainly drawn from

materials at The Newberry. It is recommended reading for anyone who is seriously interested in a one-volume, highly readable and well written synthesis of what we know about the hemisphere around 1492. The editor, Alvin Josephy, Jr., is former executive editor of American Heritage, and is an award-winner author who has always, in my opinion, been one step ahead of the pack in his selection of topics that tie historical themes together with contemporary issues.¹¹ Many of the authors chosen by Josephy follow in this series of public lectures.

While the book was in production, Hoxie and other Newberry officers conceived the idea of the exhibition. A planning grant was submitted in the spring of 1989 and was funded by the National Endowment for the Humanities during academic year 1989-1990. Hoxie and I spent a year together at the Newberry in 1976-1977 as predoctoral fellows of the Center for the History of the American Indian, but neither of us had training in Museology. My personal experience was limited to an exhibit with Michael Kaplan of the Newberry's Department of Special Collections. Michael and I shared an interest in Western Americana and we therefore collaborated on a small exhibition titled "Mountain Men and Fur Traders of the Far West," while both of us were on the staff of the library in 1981.

Because of my interest in Indian history and early texts, Hoxie asked me to be curator of the new exhibition. I agreed after learning that I would be working with John Aubrey of the Newberry's permanent staff, the leading authority at the library on American Indian bibliography. The position was also appealing once we

learned that we would be permitted to use some items from the Field Museum, complementing Newberry Library materials. Access to Field Museum collections was very important to J. Aubrey and myself in that we could not conceptualize an adequate interpretation of America before Columbus by limiting ourselves to flat materials such as books, manuscripts, and art from a library collection; even that at The Newberry, the greatest keeper of printed materials in the world on the subject of American Indians.

During the planning phase, J. Aubrey and I chose preliminary items from the thousands available in the Edward E. Ayer Collection. Within six months, we had over 200 items flagged as possibilities. Our final tally came to 287 registered items, from which we selected 99 books, manuscripts, or multi-volumed series, a few of which are duplicated in different sections of the exhibition; all of which are analyzed at least once in the catalogue under the generic series or book entry.

We also made several trips to the Field Museum, where we were kindly helped by James VanStone, Christine Gross, Will Grewe-Mullin, and Janice Klein of the Department of Anthropology. Several consultants helped us with selections at the Library and at the Field Museum. Raymond DeMallie, Director of the Institute of American Indian Studies at Indiana University and Raymond Fogelson of the University of Chicago spent several days working with us. Ross Hassig of Columbia University and an expert on the Aztec; Alan Kolata, another faculty member of the U. of C. and an Andeanist; Robert Hall, of Illinois at Chicago and a renowned North

American archaeologist, and two Field Museum officers--the aforementioned James VanStone, Curator of North American Ethnology, and Charles Stanish, Curator of Meso- and South American Ethnology, gave us time, valuable suggestions, and encouragement to proceed. Which we did after sharing our preliminary lists of printed materials and objects with Center Advisor Alfonso Ortiz during an important consultation.

An implementation grant was submitted to the N.E.H.' Public Programs Division in the spring of 1990 and was funded with several components. In addition to the exhibition, other aspects of the project include a ten-part public lecture series beginning with this one; four curriculum units and teaching posters for secondary teachers (prepared by Dr. Lawana Trout, the Center's curriculum specialist and a Professor Emeritus of English); special workshops for teachers, tours for student groups, and the catalogue.

From the beginning, America in 1492 was a team effort. It was one of Hoxie's "better ideas" and he remained Project Director throughout. During the planning and implementation phases, Karen Kohn, an experienced Chicago-based designer, provided the expertise for the layout and the knowledge of how to mount a major exhibition. She also designed and produced the curriculum units, the exhibition poster, and the catalogue. Her associate, Anne Merit, coordinated fabrication and loans and was instrumental in the final installation.

Within the library, in addition to Hoxie and John Aubrey, other key personnel included Jay Miller, Assistant Director of the Indian Center and the other professional anthropologist on the staff of the library (Project Manager); Holly Chenette (Administrative Assistant); Todd Tubutis (Research Assistant); Joan ten-Hoor, Robin Zurawski, and Carol Sue Whitehouse (Conservation); Ken Cain (Photography), and many others from the Department of Special Collections.

Meg Moss was hired as our professional editor--a superb choice. Four scholars--all anthropologists--served as our principal consultants in the final interpretive effort. They were Raymond D. Fogelson, James W. VanStone, Charles Stanish; and, Alfonso Ortiz.

Highlights of the Exhibition

The first major task was to determine which books and manuscripts and which objects would best convey concepts surrounding six major themes chosen during the planning phase. With two galleries, separated by the main entry to the library, we decided to break those themes between cultural and material worlds with social systems, religious systems and linguistic systems in the cultural gallery; technology, subsistence, and trade in the material gallery. This physical separation posed a dilemma from the outset in that we did not want to imply in our separation by galleries that the material world of Native America in 1492 was distinct from the spiritual world; or that social systems did not

influence how a society farmed, hunted, traded, or built their houses. Where an item had both utilitarian and religious purpose--such as the model of the Southern Cheyenne tipi, we attempted in our labels to be very clear about those dual meanings.

As we combed the Edward E. Ayer Collection, we intentionally avoided selection of items with photographic illustrations, preferring woodcuts, engravings, lithographs, and original art over photographs--a policy consistent with illustrations accompanying the texts in the book, America in 1492. We agreed with Harvey Markowitz, who was in charge of selecting illustrations for the book, that photographs might lead viewers to the conclusion that native cultures are static and have not changed in the course of five centuries since initial contact. Many of the earliest woodcuts and engravings chosen portray Indians with European physiognomies, especially in facial features. Nevertheless, except for those showing bestiality, cannibalism, or other overt negative stereotypes, we felt they were suitable for the positive concepts of Indian life they were intended to convey to the viewer. Examples here include the copperplate engravings of Theodor de Bry from his series, India Occidentalis, published in Frankfurt between 1590 and 1634; John White's watercolors from the Roanoake Colony in Virginia; and, images of native peoples, including Tupinamba families in Jean de Lery's 1578 Histoire . . . due Bresil.¹² (See Appendix A, "Checklist of Items" for complete bibliographical citations of works discussed above and in the following pages.)

We did not select items simply because they were Newberry treasures; or because they were very early printed items on the Americas, although many of these are in the exhibition. Examples here include the Columbus letters, the case displaying the earliest "natural histories" of the Americas by Gonzalo Fernández de Oviedo y Valdés, with openings illustrating houses and a hammock in the West Indies; Giralomo Benzoni's 1565 La Historia del Mondo Nuovo, which contains important text and woodcuts illustrating such topics as metallurgy, food preparation, and use of dugout canoes; and, Francisco López de Gómara's Historia general de las Indias, (1553), which contained the earliest printed illustration of a buffalo.

Several manuscripts and original pieces of art were chosen because of their significance in describing Indian societies for the first time. These include Father Silvestre Vélez de Escalante's 1776-1777 diary of his trek from Santa Fe into the Great Basin where he was befriended by several bands of Utes and Paiutes; and Father Atanásio Ascensión's diary kept aboard ship during Sebastián Vizcaíno's reconnaissance of the California coast in 1602; and, of course, the Popol Vuh of the Quiché Maya--that people's "Counsel Book" comparable to the "Book of Genesis" in the Bible; The Popol Vuh is not only one of a kind, being the only extant copy that survived past the seventeenth century; it is also a very special "sacred" book and had to be treated very respectfully as a manuscript still important to living peoples throughout the Maya world.

We also selected manuscript maps and Mesoamerican codices that tell stories in pictures or glyphs of places, people, and events before the European invasion. Two of these--the Codex Cempoallan and the Mapa de Siguenza--highlight the Intertribal Warfare Case in the Cultural Gallery. In the opposite room, we had a special case constructed for a manuscript map on amatl (fig bark paper) of the city of Teotihuacán, the largest urban center built in the Americas before 1492. Many other facsimiles of codices were used to make key points about Mesoamerican writing systems (at least thirteen of which have now been identified, calendar and record keeping, and astronomical calculation.

In short, our curatorial rule was to select items that fitted our thematic need; not to select materials because of their rarity or their importance in the history of European or Euroamerican printing. Thus, we have several books published as government documents or reports. We also have modern university press books and several facsimiles that suited our needs better than original editions or scarce items. These include the Codex Dresdensis, published in Austria in 1975 and a recent three-volume edition of the Codex Florentine, published in Mexico City in 1979. These facsimiles grace the Astronomy and Counting Systems Case where we also placed a piece of pottery made by Moche artisans in Peru sometime between A.D. 1-500.

In this case and several others, we integrated one or more objects that complemented materials organized around that case's central theme. For example, in the First Contact Case, we included

two examples of hammer stones found in the Bahamas by Field Museum personnel in the general area of Columbus's initial reconnaissance. These plain and polished examples were used by the Taíno in felling trees, and in making dugout canoes.

Elsewhere we placed objects side-by-side illustrations of the same item. A Plains warrior shield is a good example of an item whose owner is document. This splendid shield belonged to Eelapusash (Sore Belly), one of the greatest Crow warriors. The quipu in the exhibition is one of four hundred known to have survived from Inca times. Although we are yet to determine all of the uses of the quipu, we know that it was used to keep elaborate quantitative records, could function as a map, and may have been used as a calendar. An early seventeenth century manuscript in the possession of Denmark's Royal Library by Guaman Poma de Ayala, himself descended from the Incas, gives us a visual image of the use of the quipu. Together they paired nicely, as did several other Guaman Poma line drawings, including the one we chose as our logo for the exhibition, "Harvest Festival of the Inca in April."

Where we found an item that was identical or nearly identical to an illustration in a book, we attempted to pair the two. One opening from a recent book on the work of nineteenth century Canadian artist, Paul Kane, almost perfectly matched a Tlingit model canoe in storage at the Field Museum. From the Northwest Coast exhibition area, we were fortunate in obtaining permission to borrow several times, including this Nootka Whaling Chief's Hat,

shown in our Trade as Ceremony case with John Meare's Voyages, printed in London in 1790.

In the religion section, we reproduced a kiva mural from a publication of the Peabody Museum on Awatovi, a site in Arizona that dates to around A.D. 1480. We used the book itself in a plexiglass wall-mounted case showing two other kiva murals from the same village. From a nearby Puebloan town, a Hopi canteen was unearthed, complete with a kachina motif, and dating to the same period--a decade or so before the Columbian voyages. The murals and the pottery are the closest items we have in the exhibition to a precise dateline of 1492.

The fact that only a few items in the exhibition can be dated to the late fifteenth or early sixteenth century did not concern us as much as accurate reporting on native traditions in use before European colonization. In some instances, we portray civilizations that had undergone cyclical ebbs and flows; cultures like the Classic Maya whose descendants were very much alive and well in 1492, but whose architectural zenith had eclipsed centuries earlier.

Our opening scan murals is an interesting story itself. The designer suggested a splashy way of introducing the viewer to set the mood for each gallery. The opening mural for the cultural gallery was not difficult. We chose one of Frederick Catherwood's colored lithographs from his 1844 Views of Ancient Monuments in

Central America Chiapas, and the Yucatan. For the material gallery, we originally chose "The Interior View of a Lodge at Nootka," sketched during James Cook's 1778 visit to Vancouver Island by expedition artist John Webber. Although the Newberry did not own the original colored version of the sketch, we decided that we would display the Atlas volume with the engraving, but that we would ask permission from the Peabody Museum of Archaeology and Ethnology at Harvard University to reproduce the colored version, which they possess. Ultimately, a decision was made to drop the Webber sketch, relegating it in diminutive size to rail art on our Fishing Case. The Atlas is still in the vault, but we did have room for a volume of Cook's narrative describing the Nootkan economy.

Our replacement: a Newberry original watercolor by Harry Humphrys, one of a team of artists who accompanied George Vancouver on his voyage to the Pacific Northwest between 1792-1794. The image is testimony in itself to the concept we wanted to convey: that of a well-peopled continent bustling with activity even in the coldest regions such as Alaska. But the image is made more meaningful when it can be correlated precisely with location and with text. At Port Dick, Cook's Inlet, May 16, 1794, George Vancouver recorded the following in his journal:

A numerous fleet of skin canoes, each carrying two men only, were about the Discovery [his ship] and with those that at

the same time visited the Chatham [a second English ship], it was computed there could be not less than four hundred Indians present. They were almost all grown men, so that the tribe to which they belonged must consequently be a considerable one.¹³

The impression that the Americas teemed with activity, with tinkerers and thinkers; with horticulturalists, astronomers, metallurgists, diviners, healers, herbalists, sculptors, weavers, accountants, soldiers, boat builders, hunters and fishermen, vendors and traders who lived in all parts of the hemisphere in over 2,000 separate societies was a statement we felt compelled to celebrate in this exhibition. Our strategy in presenting this view was to select books, works of art and maps--old and new--that showed landscapes bustling with activity. Our chores included the facsimile version of a 1519 Portuguese Atlas prepared by that nation's leading cartographers. We also selected the Newberry's hand-colored 1524 printed map of the Aztec capitol city of Tenochtitlán, sent as a letter by Hernán Cortés to Charles V, Holy Roman Emperor. Scholars estimate that between 125,000 and 200,000 lived in this urban area by A.D. 1500. We also commissioned several new maps, one of which was based upon this printed map from the National Geographic Society on "Trade in the Ancient Maya World."

We were also interested in highlighting items indigenous to the Americas--especially cultigens and herbals--that are often taken for granted by Americans and others. One of our advisors suggested setting up a Native American salad bar at the end of the exhibit. I actually liked the idea, but the conservation department would not entertain the notion.

We kept the conservation staff very busy during these past few months and owe much to their interest in allowing us to have as many media as possible in the exhibition. They did not object to our incorporation of music, in books, on recordings, and with live performance at the opening on January 18, where Peter Garcia and Carpio Trujillo of San Juan Pueblo, New Mexico, blessed a newly-commissioned drum made by Steve Herrera of Cochiti Pueblo. The drum is very similar to one painted in the 1920s by Awa Tsireh, of San Ildefonso, a Pueblo painter whose work was celebrated at The Newberry during a major exhibition in 1925.

Connecting 1492 with 1992 has been a challenge, but we feel the continuity of Indian life and traditions after five hundred years was an important aspect of the commemoration. As curator, I personally thank all of the members of the Chicago Indian community, especially Mr. Ben Bearskin, Sr., and Margaret Curtis for their participation in this project.

Our exhibition ending, and the end of this talk, takes us to Cahokia Mounds, familiar to many residents of the Chicago area as Illinois's premier pre-Columbian city. After viewing the mounds,

the explorer Henry M. Brackenridge penned a letter to Thomas Jefferson, dated Baton Rouge, Louisiana, July 25, 1813. He wrote:

I am perfectly satisfied that cities similar to those of ancient Mexico, of several hundred thousand souls, have existed in this part of the country. Nearly opposite St. Louis there are traces of two such cities, in the distance of five miles, on the bank of Cohokia, which crosses the American bottom at this place. There are not less than one hundred mounds, in two different groups; one of the mounds falls little short of the Egyptian pyramid Mycerius Some might be startled if I should say that the mound of Cohokia is as ancient as those in Egypt! . . . Who will pretend to speak with certainty as to the antiquity of America--the races of men who have flourished and disappeared--of the thousand revolutions, which like other parts of the globe, it has undergone? The philosophers of Europe, with a narrowness and selfishness of mind, have endeavoured to depreciate every thing which relates to it. they have called it the New World as though its formation was posterior to the rest of the habitable globe.¹⁴

On behalf of the project staff of "America in 1492," it is our hope that this exhibition and the associated publications, tours, and programs will help in the recognition and appreciation

of the native American heritage, which is, after all, the original American story.

Endnotes

1. The Columbus Letter of March 14, 1893, translated by Richard Henry Major for the Hakluyt Society, 1847; reprinted, Chicago: The Newberry Library, 1953, pp. 7-8.

2. The context of our continued focus upon Columbus as heroic symbol of his "age" is nicely analyzed by John Noble Wilford, "Discovering Columbus," New York Times Magazine, August 11, 1991, pp. 25ff and by David Gates, "Who was Columbus," Newsweek, "Columbus Special Issue," Fall/Winter 1991. For an excellent summary of the recent literature on Columbus and his times released in advance of 1992 see Gary Wills's review essay of fourteen books and catalogues to exhibition in The New York Review, November 21, 1991, pp. 12ff.

The American Historical Association's pamphlet series, "Essays on the Columbian Encounter, edited by James Axtell, Carla Phillips, and David J. Weber attempts to address historical and ethnohistorical questions on the significance of the Quincentenary. A separate series, "Essays on Global and Comparative History" contains Alfred W. Crosby's excellent pamphlet, The Columbian Voyages, the Columbian Exchange, and Their Historians (Washington, D.C.: American Historical Association, 1987).

3. On the purpose and significance of the Chicago World's Fair (World Columbian Exposition) of 1893 see discussion in part one of Columbian Consequences: Volume 3; the Spanish Borderlands in Pan-American Perspective, ed. David Hurst Thomas (Washington, D.C.: Smithsonian Institution Press, 1991), especially Don D. Fowler and Catherine S. Fowler, "The Uses of Natural Man in Natural History," pp. 37-71 and Raymond D. Fogelson, "The Red Man in the White City," pp. 73-90.

4. J. B. Harley, "Preface" to Maps and the Columbian Encounter: An Interpretive Guide to the Travelling Exhibition (Milwaukee: The Golda Meir Library, University of Wisconsin, 1990), p. xi.

5. One of the first exhibitions mounted under the Quincentenary Initiative was the Florida State Museum's "First Encounters." The exhibition and the accompanying catalogue were criticized by many Native Americans for lack of sensitivity to Indian concerns and the historical consequences of Spanish overseas expansion. See Jerald T. Milanich and Susan Milbrath, eds., First Encounters: Spanish Exploration in the Caribbean and the United States, 1492-1570 (Gainesville: University Presses of Florida,

1989). For a discussion of the controversy surrounding the exhibition see Susan Milbrath and Jerald Milanich, "Columbia Conflict," Museum News September/October 1991, pp. 34-37.

The National Gallery of Art's "Circa 1492" covered the entire globe, devoting approximately one-fourth of the exhibition area and an equivalent percentage of space in the catalogue to the Americas. See Jay A. Levenson, ed., Circa 1492: Art in the Age of Exploration (New Haven: Yale University Press for the National Gallery of Art, 1991).

The Smithsonian Institution's "Seeds of Change" focuses on botanical and zoological consequences of global exchanges after 1492. The exhibition gingerly touches the subjects of ecological and demographic consequences of these biological exchanges. See Herman Viola and Carolyn Margolis, Seeds of Change: Five Hundred Years Since Columbus; A Quincentennial Commemoration (Washington, D.C.: Smithsonian Institution Press, 1991).

6. For recent issues of National Geographic Magazine that fit this genre see "Our Search for the Columbus Landfall," 170(5) November, 1986; and "Search for Columbus," 181(1), January, 1992.

The National Geographic Society has also attempted to show the other side of the equation with "1491: America Before Columbus," 180(4) October, 1991.

7. The best example here is the Public Broadcast System's production, "Columbus and the Age of Discovery," a seven-part television and video series from WGBH, Boston (Princeton, N.J.: Films for the Humanities and Sciences, 1991), with accompanying text by Zvi Dor-Ner with William S. Scheller, Columbus and the Age of Discovery (New York: William H. Morrow, 1991).

8. Suzan Shown Harjo, "My Turn: I Won't Be Celebrating Columbus Day," in When Worlds Collide: How Columbus's Voyages Transformed Both East and West, Newsweek, "Columbus Special Issue," (Fall/Winter, 1991), p. 32.

9. Manuel Salmoral, America, 1492: Portrait of a Continent 500 Years Ago (New York: Facts on File, 1990).

10. Alvin Josephy, Jr., ed., American in 1492: The World of the Indian Peoples Before the Arrival of Columbus, (New York: Alfred A. Knopf for The Newberry Library, 1991); William R. Swagerty with John S. Aubrey, America in 1492: American Civilization on the Eve of the Columbus Voyages (Chicago: Northwestern Printing House for The Newberry Library, 1992).

11. Especially Alvin Josephy, Jr., Red Power: The American Indians' Fight for Freedom (New York: McGraw-Hill, 1971).

12. We were guided by the excellent discussion on "first images" in several scholarly works including Hugh Honour, The New Golden Land: European Images of America from the Discoveries to the

Present Time (New York: Pantheon, 1975); Paul Hulton and David B Quinn, The American Drawings of John White, 1577-1590. 2 vols. (London: British Museum and the University of North Carolina Press, 1964); Fredi Chiapelli, ed., First Images of America. 2 vols. (Berkeley: University of California Press, 1976); and, Olive Patricia Dickason, The Myth of the Savage and the Beginnings of French Colonialism in the Americas (Edmonton: University of Alberta Press, 1984); Roger Schlesinger and Arthur P. Stabler, André Thevet's North America: A Sixteenth Century View (Montreal: McGill-Queen's University Press, 1986); and essays in Christian F. Feest, ed., Indians and Europe: An Interdisciplinary Collection of Essays (Aachen: Herodot, Rader-Verlag, 1987).

13. George Vancouver, A Voyage of Discovery (London: Printed for G.G. and J. Robinson, Paternoster-Row, and J. Edwards, Pall-Mall, 1798), Vol. 3, p. 150.

14. Henry M. Brackenridge, "On the Population and Tumuli of the Aborigines of North America. In a Letter from H. H. [sic] Brackenridge, Esq. Thomas Jefferson--Read Oct. 1, 1813, Baton Rouge, July 25, 1813," Transactions of the American Philosophical Society, new series 1 (1818): 151-59, at p. 158-159.

Religion in America in 1492

by
Sam D. Gill

It was a dark and misty winter afternoon. As I crested the hill east of Zuni I was greeted by the familiar sights of Corn Mountain to the south and Zuni village nestled in the valley below. I thought of Frank Hamilton Cushing's description of Zuni as it first appeared to him in 1879:

Below and beyond me was suddenly revealed a great red and yellow sand-plain. . . . To the left, a mile or two away, crowning numberless red foothills, rose a huge rock-mountain, a thousand feet high and at least two miles in length along its flat top, which showed, even in the distance, fanciful chiselings by wind, sand, and weather. . . .

Out of the middle of the rock-wall . . . flowed a little rivulet. Emerging from a succession of low mounds beneath me, it wound, like a long whip-lash or the track of an earth-worm, westward through the middle of the sandy plain and out almost to the horizon, where . . . it was lost in the southern shadows of a terraced hill.

Down behind this hill the sun was sinking, transforming it into a jagged pyramid of silhouette, crowned with a brilliant halo, whence a seeming midnight aurora burst forth through broken clouds, bordering each

misty blue island with crimson and gold, then blazing upward in widening lines of light, as if to repeat in the high heavens in earthly splendor.

A banner of smoke, as though fed from a thousand crater-fires, balanced over this seeming volcano, floating off, in many a circle and surge, on the evening breeze. But I did not realize that this hill, so strange and picturesque, was a city of the habitations of men, until I saw, on the topmost terrace, little specks of black and red moving about against the sky. It seemed still a little island of mesas, one upon the other, smaller and smaller, reared from a sea of and, in mock rivalry of the surrounding grander mesas of nature's rearing.¹

It is a century later, I mused, and everything is the same. Perhaps this scene is little different from that seen by Fray Marcos de Niza in May of 1539 when he made the first European contact with native peoples in what we now know as North America. This is an ancient road traveled by many. It is like traveling back nearly half a millennium. I began to look forward to seeing religious events out of the past.

But wait! I was brought out of this reverie by a traffic jam. Sitting in my car. Waiting. I felt irritated. I was eager to get to the village. What might I be missing? It would be my first time to experience Shalako. I had read so much about Shalako, a grand ceremonial affair, one of Zuni's most important, occurring

early every December. What could be holding up traffic in so remote and ancient a place? Seeing the flashing lights of a police car I concluded it must be an accident. Surely traffic would soon move along. The police car moved slowly, very slowly, parallel to the line of traffic. Why so slow? As it approached me I could finally see. The police car was escorting a small troupe of Zuni figures along the highway. At the head of the group was a Shalako, a twelve foot tall feather-topped, bird-headed, beautifully costumed figure. Slowly the procession passed and I was able to move along, park, get a quick bowl of chili, and prepare myself for a magical mystical night at Zuni. Well a little has changed since Cushing's day.

We really cannot know Native American religions as they were practiced in 1492. Songs, prayers, dances, chants do not survive as they were, but they are passed along in traditions like Shalako which remain vital today. From these traditions and others that have been recorded, we can make some general observations and some pretty interesting guesses about native American religions as they must have been in 1492. What I'm interested in presenting to you is my sense of a principle I believe characterized Native American religions not only in 1492, but throughout their existence. This principle has to do with the creativity and vitality of these religions. Though at first it may seem inappropriate I will call this principle the play of Native American religions. I beg your patience while I explain.

Some years before that scene I have described entering Zuni, I sat atop a pueblo in the Hopi village of Hotteville. The occasion was Niman, the home dance. This stately early August event marks the closing of the kachina season that begins in December. Kachinas, messenger spirits, appear as masked dancers for the last time before returning to their homes in the San Francisco Peaks some ninety miles to the west, easily seen on this brilliant hot day. The sounds--clack, jingle, clack, jingle--announced their arrival. As they entered the village plaza I recognized them as my favorite, angak'china, the long hair kachina. To me, their beauty is somehow in the simplicity. Oh they are elaborate enough with feathers and jewelry, kilts and sashes. But their faces are simple--a small turquoise rectangle with simple markings for mouth and eyes--set against long hair flowing from the crown of the head nearly to the waist in front and back. They brought gifts of food. They brought dolls for the children. Their dancing brought life and happiness to everyone. I could feel their power then. As I remember them I feel that power now.

Then there was the time, I've forgotten the year, I visited the Franciscan Fathers at St. Michael's near Window Rock on the Navajo Reservation. I enjoyed the hospitality of the Fathers, though awestruck by the sheer fact that I was walking the same grounds, sleeping under the same roof, where Father Berard Haile had lived so many years of his life. He was a sensitive and insightful friend to Navajos, a devoted inquirer about their religion, though he never participated. The second or third day

I was there, after an appropriate time for us all to get acquainted, I was asked if I wanted to see the Navajo ritual art collection. It was not a public display. I felt honored. Once in the little room burgeoning with shelves, cabinets, and drawers I was enthralled by the marvelous things about me. We talked easily of these things. I was invited to look at a set of Navajo ye'ii masks kept in a drawer. As the drawer glided open, suddenly it came to me. I knew these masks. They had been given as a set to Father Berard by the family of a deceased singer, or medicine man, who feared, because of their power, to keep them. Father Berard had studied and photographed these very masks in the preparation of his book Head and Face Masks of the Navajo (1947). I gazed upon the familiar empty buckskin bag-shaped masks. Compared with masks made by most other Native Americas these seem so crude, so inconsequential. I don't know whether it was because I know how powerful Navajos consider these masks or that Father Berard had been involved with them, but I couldn't bring myself to touch them, or even to look long upon them. These same strangely ambivalent feelings returned when, some years later, I was shown two Navajo masks by an art dealer in Chicago.

Masks worn, masks performed, are captivating. They take hold of us. They mesmerize. Their power is both that of beauty and that of darkness. We are attracted, fascinated by masking, yet somehow we are also fearful. What is this power? How might we appreciate it even if we know we'll never be able to understand it?

It may at first seem incompatible, perhaps even inappropriate, but I want to show that the power, indeed the very nature, of masking can be illuminated if seen as a kind of play. It is not theatre that I have centrally in mind, though that too is germane. What I have in mind is a kind of way of structuring things, a kind of vitalizing organization. Please permit me a short detour that will quickly take us a very long way from Native American religions and ritual arts.

Though Johan Huizinga's classic Homo Ludens, first published in 1938, is the foundation for almost all work on play during the last half century, it disappointed me. I looked further. My journey in pursuit of an understanding of play is obscure now even to me, but it did lead me eventually to Friederich Schiller's set of letters published together in 1793 under the title On the Aesthetic Education of Man, now a classic in aesthetics. Since Schiller argued for the importance of aesthetic education, daring to propose the aesthetic education is essential to the realization of human potential, the letters are sometimes cited as rationale for including the arts in school curricula.

Foundational to his argument is Schiller's description of the two forces or impulses that drive human action, that define the human character. Schiller describes these two opposing forces in various ways. In one formulation, Schiller wrote that these forces constitute

two contrary challenges to man, the two fundamental laws of his sensuo-rational nature. The first insists upon

absolute reality: he is to turn everything which is mere form into world, and make all his potentialities fully manifest. The second insists upon absolute formality: he is to destroy everything in himself which is mere world, and bring harmony into his changes. In other words, he is to externalize all that is within him, and give form to all that is outside him.(XI.9)²

Schiller formalizes these forces in terms of drives or impulses: the sensuous drive and the formal drive. The sensuous drive proceeds from the sensual and physical aspect of human existence. It is concerned with physical place in time and space. Whenever this drive acts exclusively one is but "a unit of quantity, an occupied moment of time"(XII.2) there is no person, no enduring form, only the moment of sensation. The formal drive proceeds from the rational nature and strives to set the human at liberty from the flux of change and sensation. It strives to embrace the wholeness of time and space, seeking eternity to the annulment of temporal change, of determining event. Yet, when this impulse dominates, the human entity loses individuality becoming an idea, a species. Humans are no more in time, they have become time. (XII)

Schiller holds that neither impulse is dispensable, yet both require restriction and moderation.(XIII) Indeed, one reaches perfection through, as he described it,

a reciprocal action between the two drives, reciprocal action of such a kind that the activity of the one both

gives rise to, and sets limits to, the activity of the other, and in which each in itself achieves its highest manifestation precisely by reason of the other being active.(XIV.1)

One cannot achieve this fullness so long as only one of these two impulses is exclusively satisfied or both alternately. Schiller argues that one would gain a "complete intuition of his human nature," a "vision [that] would serve him as a symbol of his accomplished destiny," when these drives are conjoined in a third drive, that is, an experience in which "he were to be at once conscious of his freedom and sensible of his existence, were, at one and the same time, to feel himself matter and come to know himself as mind."(XIV.2)

Remarkably, in his attempt to give clarity to this combination of impulses, Schiller turns to the language of play, calling "that drive . . . in which both the others work in concert"(XIV.3) the "play drive," begging his reader patience with the term until he might justify its appropriateness. This third drive is

directed towards annulling time within time, reconciling becoming with absolute being and change with identity.

. . . The play-drive, in consequence, as the one in which both the others act in concert, will exert upon the psyche at once a moral and a physical constraint; it will, therefore, since it annuls all contingency, annul all constraint too, and set man free both physically and morally.(XIV.3 and 5)

Whereas the object of the sense drive is "life" and the object of the form drive is "form," the object of the play drive, to Schiller's understanding, is "living form," a concept that denotes aesthetic qualities, that is, Beauty. Living form, Beauty, in Schiller's reckoning, is the consummation of humanity. He pronounces: "With beauty man shall only play, and it is with beauty only that he shall play. . . . Man only plays when he is in the full sense of the word a human being, and he is only fully a human being when he plays."(XV.8 and 9)

Why "play"? By using the term play, doesn't Schiller risk trivializing both human perfection and aesthetic qualities? What is there of play that helps Schiller communicate these central concerns? He holds that his use of the word is fully warranted in terms of its usage in common speech, where play denotes "everything which is neither subjectively nor objectively contingent, and yet imposes no kind of constraint either from within or from without."(XV.5) In other words, Schiller appeals to the use of the word play in common speech, where he holds that it is understood neither as a state of mind nor as class of objects, where it is understood to be engaged without goal or necessity, that is, play contains its own satisfaction.

Schiller was not advancing a new theory of play, he was not advancing a theory of play at all. He was merely relying on what he considered common knowledge. What Schiller sensed of play is that it is neither state of mind nor class of objects but rather what we might call a structurality, the distinguishing principles

or grammars that characterize the vitality of structures, a set of structuring principles, a metastructure. It is the structurality in which oppositions, even anomalies, may at once be held together without reconciliation or reduction. It is a structurality of oscillation or vibration, of movement back and forth. It is not alternation, a taking turns, but a momentary focus on one structural element that reveals the power and dynamics of the opposing element while also setting forth its limitations. Schiller thought of it in the terms of reciprocity and oscillation.

Let me develop this in the common terms of a game. A mere "game" may be thought of as a set of relationships and activities prescribed by a set of rules, often including the designation of a space, and an objective. Games, in general, may be designated as a particular kind of activity. This may be extended to the designation of a state of mind, a mental strategy, or an attitude. The word "game" is sometimes even used as a verb, though I think a remarkably inelegant one, as in such phrases as "to game a situation." A game, described in the structural terms of rules and objectives clearly illustrates this structurality I am, following Schiller, calling play. Game is not synonymous with play. Common to the rules of a game is a description of "the play." "The play" of a game is a reference to its particular structurality, i.e., its structuring principles. A game "in play" subjugates its goal or objective to the holding together of opposing forces, an oscillation or back and forth movement among them, without resolution. When the play ends, i.e., when its structuring

principles fail or cease to be operative, the game is over, play ends. From this perspective, we can see that the play can actually end before the rules of the game bring it to an end, as when one team scores so many points that the other team has virtually no chance of catching up in the time remaining. Play is not game; game is not play. Game is played. There is the play of the game.

While mere games have a structurality of play, they do not hold it exclusively. This is what Schiller acknowledged in his use of the term play to identify the third drive, the play drive. The characteristics of play are structurally echoed in the phrasing by which Schiller elaborated the play impulse:

the play-drive, in consequence, as the one in which both the others act in concert, will exert upon the psyche at once a moral and a physical constraint;(XIV.5)

In another letter, he wrote,

it is precisely play and play alone, which of all men's states and conditions is the one which makes him whole and unfolds both sides of his nature at once;(XV.7)

And in yet another letter, we read,

the utmost that experience can achieve will consist of an oscillation between the two principles, in which now reality, now form, will predominate. Beauty as Idea, therefore, can never be other than one and indivisible, since there can never be more than one pint of equilibrium; whereas beauty in experience will be eternally twofold, because oscillation can

disturb the equilibrium in twofold fashion, including it now to the one side, now to the other.(XVI.1)

Schiller argued that when the sense and form impulses are interrelated in play, at least the idea of human perfection--the aesthetic--may emerge though not as the direct object. The whole series of letters is intent upon showing that beauty emerges when the conflicting and potentially destructive human impulses are conjoined in play.

Whereas Schiller discusses play in the framework of duality and sees the play drive as exemplified by beauty, I want to extend the notion of play. It surely is more effective to acknowledge that play may engage many forces, not just two. It is more useful to consider that play is really synonymous with structurality, with structuring principles, and therefore can be considered to be a way of characterizing and evaluating the vitality of structure, any structure. Play, in this view, is not one set of activities or structures among others; it is not one state of mind among others.

This view of play may be clarified by discussing the terms structure and structurality in the context of Schiller's form and sense drives.

To think structure is to abstract, a temporary domination of the "form drive." To distinguish structure tends to deny the sensual connections of the form, its performance, its connection to specific moments in time and space, but it is a drive to do so based on the hoped for glory of transcending the concrete and specific in flight toward the universal.

To think structurality is to abstract upon abstraction, a way to think the structure of structures, a second order abstraction, the form drive gone made. While it might be thought of as an even higher flight from the senses, to think of play as structurality is an assertion that the "play drive" cross-fuses the formal side of structure with the performance side of structure. It is an attempt to acknowledge the vitality and dynamics of event that structure, the first-order abstraction, tends to nullify. The concept "structure" tends to denote fixation and rigidity. Structure is a fixed stable form. The concept "structurality" is intended to denote an evaluation of the dynamics, movement, engagement, interaction, and vitality of structure.

Play is structurality, a characterization of structuring principles. All structures have structurality. Play is a way of acknowledging certain structuring principles or tendencies.

This detour into play has, of course, been taken with the expectation that it will provide insight into Native American masking and Native American religions generally. Let's now see.

If anything distinguishes a mask as an object it is that it is a rigid sculpted face. It is like a face in form only--it has facial features, but it has no facial sensuality. Notably the great bulk of masks are self-consciously false; that is, mask makers appear to take every opportunity to avoid making a mask that might be mistaken for a living face.

But a mask without a masker, the one who bears the mask, is but a lifeless piece of sculpture. Such objects are most often

used as wall decorations. Masking, as a ritual and cultural activity, is always the conjunction of the two--the mask and the masker. I would want to argue that at the most basic definitional level, the concept "mask" requires the conjunction of these two elements. There is a double nature necessary to the very idea "mask." It is not a doubling that is eventually resolved, but is ever at play.

This simple observation of the double nature of masking when conjoined with the theory of play we have developed, immediately begins to suggest interpretive possibilities.

A mask as an object, rigid and fixed in form, presents in a formal way the eternal and universal idea of a given figure, the figure the mask presents. Apart from the masked presentation this figure has no physical, no sensuous nature. He or she is pure form, idea, or concept. Hence the masking presents rather than represents. The masker, apart from a mask, is a living breathing sentient being. As a human being, she is, in Schiller's terms, the combination of sensuous and formal impulses. But as masker, the formal drive is subsidiary to the sensuous self. By donning a mask one gives up much of the form that identifies the human individual. Masking heightens human sensuality. Behind the mask a human masker is, in one sense, reduced in the direction of his pure sensuality. The mask at once limits and controls the sensual faculties that distinguish the nature of the masker as a human being. The masker's vision is impaired, as is his senses of hearing, touch, as are her abilities to communicate through speech and facial

expression. But as the masker's sensual faculties are impaired she provides a sensuality, a living existence, to an otherwise lifeless form, the mask. This sensual element tempers the pure formality and changelessness apparent in the mask by bringing it into concrete actions in a specific time and place. Both mask and masker must exist. Each must exert its nature upon the other. Masking then brings the pure form of deity, spirit, or concept sensuality, physical existence, while at the same time stripping the human masker of her own formal self only to engage her with another form. The mask and the actions of masking are a field of play. The gap between the entity presented through masking and the human being underlying the presentation is a field of play, a field in which the figure presented comes into physical being, a field in which humans come to know through experience, from the inside out, the spirits and deities on whom their lives and world depend. In this play between the two, something emerges, comes to life, that is much greater than either one separately or even by the simple addition of the two.

Schiller wrote that perfection is achieved through a reciprocal action between the two drives, reciprocal action of such a kind that the one both gives rise to, and sets limits to, the activity of the other, and in which each in itself achieves its highest manifestation precisely by reason of the other being active. If a spirit, a deity, a mythic figure is formalized in a mask, the represented entity becomes manifest, comes to life, through the interplay with the human masker. Any human may

contemplate and study the forms of the spirits, gods, and mythic figures--forms often homologous with the very order of the universe--but in the activity of masking a human being actually manifests these figures, stands inside of them, giving them sensual existence. The masker fills up and comes to know the form represented by the mask.

Masking is a remarkable example of what Schiller recognized as the product of play. he called it "living form," a term that would serve well as a synonym for masking. And to continue to following Schiller, it was "living form" that he used as the basis for his understanding of "Beauty." It is the working in concert of the sensual and formal drives that gives rise to the play drive and hence to Beauty. This conjunction is also necessary in masking. If the masker does not know the figure whose face she is bearing; if the masker refuses to yield his personal identity to play the mask (though this is unbelievably difficult to do); the masking is likely to appear false, awkward, anomalous--the sensual aspect of the masking prevails over the formal. If the mask as a form, as an ideal, os overwhelms the masker as to render her lifeless, unable to act, stricken under the weight of the idea that must be made manifest, the masking fails; it is but a tableau. Here the formal aspect of the masking prevails over the sensual. It is only in the oscillation, the vitalizing reciprocal engagement of the mask and masker, the formal and the sensuous, that masking achieves "living form," that masking becomes Beautiful.

Entrainment is perhaps another way to describe this working together that yields living form. When two people walk together, in time they will begin to match strides. When a number of people are hammering together, in time they will fall into a hammered rhythm. This is entrainment and it occurs with masking as well. Once in costume, masked, and in the masking events, the masker's actions are entrained with the character of the masked entity, as it is understood by the whole masking community. When entrainment occurs in masking, the entity presented by the masking comes to life and the maskers achieve experiential knowledge of this entity. This is "living form"; this is Beauty.

Isn't this a wonderful understanding of masking? With this understanding of masking let's head back to Zuni at the time of Shalako. Late that December afternoon crowds gathered along the Zuni River at a place where a bridge had been constructed of mud and stone. In time a procession of masked figures, called the Council of the Gods, crossed the bridge and entered the village. Leading the group was a young figure carrying a fire brand, Shulaawisi, the fire god. His mask and body were painted black with blotches of light colored dots all over. Next came Sayatasha and Hututu, the Rain Gods of the North and South. Two yucca-carrying whippers, Salimopiya, came last. The group proceeded to six locations in Zuni village where holes had been dug, representing the six directions. At each hole the group deposited prayer plumes and sprinkled corn meal. These rites blessed the village, bringing it into correspondence with the order of the

whole world into correspondence with myth and history. The procession ended at one of the Shalako houses prepared for this event. Here Sayatasha faced Hututu and called "Hu-u-u." Hututu responded "Hu-tu-tu, Hu-tu-tu." Then the group entered the house.

Later that evening I stood, ankle deep in cold mud, for hours outside this house enthralled by what I was seeing and hearing. Inside this Shalako house was a long rectangular room. On one end was an altar and a place designated for singers and drummers. Many Zuni people had gathered in the large open portion of the room sitting on chairs and benches. A dance corridor remained open along one long interior side of the room. It was along this dance corridor sitting on benches that the council of the Gods took its position.

With their masks propped atop their heads the council began to chant in unison. This rhythmic flow of speech continued hour after hour throughout the evening. Not only was this most wonderful, but amazingly the Council shared the house with a pair of Shalako dancers who were performing their own, yet different, chant. Two groups chanting different words, hour upon hour. The overlapping sounds, in a language I did not understand, were enchanting. I couldn't seem to stop watching and listening.

Near midnight, the chanting complete, all too a break from the ritual intensity to eat and to rest. Finally the dancing began featuring the wonderful swooping dances of the Shalako. The Koyemshi, a troupe of mud-head clowns, performed their buffoonery in another house.

The complexity of Shalako is daunting and so much is transparent to this single all night performance. Shalako is actually a many day performance culminating nearly a year of extensive preparation. The members of the council of the Gods spend much of their time for a year enacting the responsibilities of their office. Shalako required the building, or at least the refurbishing, of six to eight dwellings in which to house the event. The Shalako is but one of many Zuni masking rituals performed throughout the year.

Confining our attention to but one figure, Sayatasha, we may begin to appreciate something of the play of masking. Around the time of the winter solstice, shortly after Shalako is performed, the members of the Council of the Gods who will serve the following year are chosen. After these men are chosen they make offerings at the river to the ancestors, a first performance of the ritual acts they will conduct daily until they perform Shalako almost a year later. Every night they meet to discuss aspects of Shalako and late at night they learn the prayers they will recite during Shalako. Every morning they arise before dawn and prepare to offer prayer meal to the rising sun. Each month at the time of the full moon they offer prayersticks to shrines and at the new moon they travel many miles to plant prayersticks at springs in the mountains south of Zuni.

The Zuni man who will portray Sayatasha, the leader of the Council, is called by the title Sayatasha Mosona and in all that he does during this year he must act in an exemplary manner. He

must work hard physically, socially, mentally, and religiously. He is responsible for the Zuni religious calendar, reckoned primarily by the position of the moon. Sayatasha Mosona must notify all parties at the appropriate time to prepare for ceremonial occasions. This man must even walk like Sayatasha, a gait that is ponderous, with exaggerated strides. Sayatasha walks slowly poising each foot in the air momentarily before bringing it heavily to the ground. Like the Rain Priest he will portray, this Zuni man is sought out for counsel and pointed to as exemplar of Zuni life ways.

The Sayatasha mask and costume are elaborate. To examine the appearance of Sayatasha reveals the many attributes of Zuni culture and religion that are brought into play in his masking. Sayatasha is both Rain Priest of the North and Bow Priest. He is the Chief of the Kachina Village which lays beneath a lake two days walk to the west of Zuni, the home of Kachinas and the home of the dead. This remarkable figure, who appears but one time each year at Zuni on this Shalako night, is thus associated with both agriculture and hunting, with both life and death, with both the Zuni world and the world of kachinas and the dead. The mask and costume reflect the conjunction and interplay of these associations.

The mask is bell jar shaped. Atop the head are downy feathers, bluejay feathers, and feathers of summer birds all fastened to a prayerstick attached to the head, a designation of a Rain Priest. Sayatasha means "Long Horn," a name he is sometimes called when Zunis use English. This designation refers to his

distinguishing feature of a single long horn extending outward from the right side of his head. This horn is for long life. A large flat "ear" extends outward from the head on the left. The right eye is a short slit, short according to Zuni reckoning for witches that their lives be short; the left eye corresponds with a long line that extends outward into the "ear," long so that the lives of good people will be long. Black goat hair hangs from the horn and over the forehead. A white cotton thread hangs down behind. The face is painted turquoise. The elkskin collar is stuffed with wool.

Sayatasha wears a white cotton shirt cut very full over which he wears an embroidered white blanket fastened on the right side. He wears a white cotton dance kilt with a blue band, an embroidered sash, a red woman's belt, fringed white buckskin leggings, and blue dance moccasins. The cotton dance kilt and shirt and the dance moccasins are those of a Rain Priest and are associated with bringing rain. He carries a fawn-skin quiver over his right shoulder. He wears many necklaces and bracelets. In his right hand he carries a deer scapulae rattle and in his left a bow and arrow and many prayersticks. The quiver, bow and arrows, prayersticks, and rattle identify Sayatasha as a hunter and warrior.

Though this is but a superficial consideration of a single figure in the very complex Shalako rituals placed loosely in his cultural and religious contexts, it may be seen that Sayatasha is not merely a man wearing a mask and costume. Sayatasha is a field

of play, a field in which a particular Zuni man has practiced and played almost constantly for a year. It is the contrasting and even contradictory aspects which, when brought together in this masking, initiate a play that has the potential to produce a living form, to be experienced as Beauty.

Sayatasha is at once Sayatasha and Sayatasha Mosona: spirit and human, eternal and mortal, form and sense, of the domain of the dead and of the living. Sayatasha is at once Rain Priest and Bow Priest; at once hunter and warrior; bringer of rain and long life, controller of weather, while at the same time killer of witches, protector, deer hunter, and killer of enemies.

Indwelling Sayatasha's form is for a Zuni man an entry into Zuni philosophy and belief, but it is also to bear the responsibility and to be the vehicle for transforming these formal aspects of Zuni religious life into the experience and history of the Zuni people. Masking Sayatasha is, through play, to bring into concert many pairs of mutually exclusive attributes that constitute Zuni reality. The play does not resolve these attributes to unity; the play demonstrates that Zuni religious culture is given vitality in the interaction among these forever opposing and contrasting values and attributes.

Other masking examples will be useful, but first I want to comment on how I see this notion of play as characterizing much of Native American religious experience. To focus on the play of Native American religious action is to attempt to articulate the

dynamics of what Jonathan Z. Smith meant when he said, "it is precisely the juxtaposition, the incongruity between the expectation and the actuality that serves as a vehicle for religious experience."³ When we think of religions, especially Native American religions, we tend to think of principles like balance, harmony, centeredness, piety, respect for the earth, kinship with the animals and plants. What we often fail to realize, I believe, is that such a religion would scarcely be either alive or real. What we fail to see is that religion generally, and most certainly Native American religions, is a process of manipulation and negotiation. It is a process of play in which the many formal dimensions of tradition are strapped on like masks and made to dance and have presence in an ever changing and always demanding world. It is inter-play in this gap that gives life to any religious tradition and it is the extraordinary playfulness of Native American religions that makes them exemplary among religions.

I am not speaking simply of using police cars as escorts for the Zuni Shalako. While I'd argue that Zuni Shalako is constantly a process of application, Native American masking events illustrate this playful dynamics.

For a number of years I lived in Tempe, Arizona, just three miles from the Yaqui village of Guadalupe. Every year during the season of Lent I would drop by Guadalupe now and then to observe their Easter celebration. The Yaqui people lived for centuries in Sonora Mexico before many were forcibly displaced to several

communities in Arizona. Their history is remarkable. Yaquis effectively maintained separation from the Spanish for nearly a century after the first contact in 1533. After shunning Spanish influence for nearly a century, suddenly, it would seem, early in the 17th century they requested missionaries be sent to them. The Jesuits arrived in 1617 and in two years the Yaquis had undergone remarkable transformation i their cultural and religious lives. They became Christian at that time, but in their own way. For one hundred fifty years they allowed missionaries to live among them, but finally in 1767 they found Mexican pressure so great that they expelled the missionaries. More than a century followed during which the Yaquis enjoyed an autonomous existence. However, though they fought gallantly, in 1887 they were overcome by Mexican troops and dispersed far and wide.

In time, having formed communities near Tucson and Phoenix, some of the Yaquis began to revive their cultural and religious practices, especially Easter. The whole season of Lent is filled with rite and ceremony centered on the small Yaqui church in Guadalupe, standing in the shadow of the larger Catholic Mission church just to the north of it. I'll not describe the complex of events enacted throughout the whole Easter season, only those of the climactic day, Easter Saturday.

During Easter week the attention of Guadalupe is focused upon the Yaqui church and the plaza which extends to the east in front of it. Many of the events--the processions around the way of the cross, the capture and crucifixion of Christ, the control of the

church by the evil Chapayekas--are somber and heavy in tone. yet adjoining the plaza in the area in front of the Catholic mission church, a carnival with rides and booths seems to foreshadow and presage the coming victory and its celebration in fiesta.

Easter Saturday is the dramatic climax of this old struggle of good against evil. Early Saturday morning the masked fearful evil Chapayekas who have captured and crucified Christ and taken over the church, leave this domain and in procession escort an effigy of their leader, Judas, into the plaza and affix it to a large cross. They retire to the fringes of the village. Throughout the morning people gather. Many Yaquis approach the anti-Christ to affix a token of penance to him, usually a scarf

Pascola dancers, with their small animal masks on the sides or backs of their heads, mingle among the crowds with coffee cans receiving donations as a man, speaking alternately in Yaqui, Spanish, and English, informs the visitors about what is happening and repeatedly asks for donations. Vendors sell food and drinks. There is an air of expectation. Late in the morning the Maestro, or leader of the Yaqui church, along with a small group of worshippers carrying a cross appear in the plaza and begin a worship service read from a Yaqui book of worship. The group proceeds very slowly in the direction of the church. Once they reach the church they enter followed by many women and children. A curtain is drawn across the door.

At the east end of the plaza appear black garbed Pilates, representing soldiers. In two files they march slowly forward to

a drum beat with an occasional eerie flute melody. The Chapayekas follow, prancing and playing, firing toy guns and clacking their wooden daggers on their wooden swords. They often stop to wiggle their hips to awaken their belts of horn rattles. The long bands of cocoon rattles wrapped about their ankles emphasize in sound their every step.

The masks of the Chapayekas are wild and colorful. Many look something like cow heads, but others clearly represent stereotypic images particularly of ethnic peoples: a yellow-faced Chinaman with pigtail; a red-faced, big-nosed, cigar store Indian with long braided black hair. European Americans are not always absent from masked representation. At the end of the Nixon era one Chapayeka was an unquestionable representation of Richard Nixon. Chapayekas are a strange mixture of fearfulness and humor.

This huge procession of perhaps a hundred men march forward into the plaza. The retreat. Again and again. On each advance they move closer to the church. Finally, at mid-plaza, the lines stop moving. They wait in silent readiness. Suddenly the church bell begins rapidly tolling. Simultaneously the lines of Pilates and Chapayekas rush noisily toward the church. As they approach the church the curtain covering the door flies open and the Pascolas along with many women and children rush out filling the area immediately in front of the church. They are armed with hands full of flower petals and green leaves. As the evil ones approach they are pelted with flowers and leaves, the transformed blood of

Christ. Repelled, the Chapayekas return to their positions mid-plaza and reassemble for another attack.

As the women and children return to the church, some of the Chapayekas, those newest to this role, fall to the ground in the area around Judas. They crawl forward. There, met by their family sponsors, they remove their masks under the protection of a blanket or an overcoat. They leave their masks and their daggers and swords at the feet of the Judas effigy. With heads covered the sponsors rush these maskers at a full run to the church where they are rededicated to Christ. Other sponsors approach the remaining Chapayekas who remove some aspects of their costumes--rattles, blankets, sandals.

Quiet returns. Once again the bell rings. The second attack is launched. Again the women and children are successful with their flowers in repelling the onslaught. Other Chapayekas give up their masks. Those remaining remove even more of their costumes.

This attack is carried out one final time. On its failure even the last of the Chapayekas remove their masks and are rushed to the church.

The huge straw-stuffed Judas figure is now surrounded by Chapayeka masks. The swords and daggers are all propped in a line around this figure.

As the last of the head-covered figures reaches the church, the Judas effigy surrounded by the masks and boxes of debris

generated by all the events is set afire. It is quickly an inferno.

Simultaneously, a troupe of Matachini Dancers enters the plaza and begins to dance and the Pascolas joined by a Deer Dancer appear with their musicians immediately in front of the church. It is fiesta time.

There is really so much to be considered in terms of the play of the Yaqui masking on this occasion. There is the play of the past and the present. The ancient Pascola masks, likely representing animals, which predate contact, appear in the same event as the Chapayeka representations of contemporary stereotypes. The Yaquis seem masterful at playing the past and the future in the same plaza.

Other Yaqui masking features are of special interest to me. The men who mask the Chapayekas comprehend the power of the mask. It is a power that threatens to overcome the masker with the character and attributes that the mask presents. In recognition of this power and as protection against it, the masker wears a rosary about his neck. All the time that the mask is upon his head, he places the cross of the rosary in his mouth. Constantly he must pray or say the name "Jesus." This is his protection. From our discussion of masking in terms of play, this practice is telling. The Yaqui masker, by carrying a rosary cross in his mouth, is demonstrating a determination to maintain that masking is and must be a double identity. Indeed those who portray Chapayekas often talk of the difficulty, but necessity, of having

to act in two ways at once. The masker is not the entity presented by the mask, yet clearly the masker is that entity for the Chapayeka cannot exist without the masker. This conjunction of form (the idea of evil) and sense (the religious Yaqui) must remain at play. Each one both limits and makes possible the existence of the other. If kept in a playful relationship, what emerges is living form, Beauty. Another very moving aspect of this event is when the maskers remove their masks and are rushed with their heads covered to the church. It is as though the masker, once free of the Chapayeka mask, is pure sense, that is, formless, a moment of sensation. Certainly with head covered he is faceless, he has no identity. He must be rushed to the church, the opposite pole from the Judas effigy and the Chapayeka mask, to acquire another form, that in the image of Christ and the good.

Finally, in its annual enactment of the Easter pageantry, the Yaqui demonstrate the importance of this play between good and evil. Every Easter good is victorious. That much is certain. But what makes this victory powerful correlates directly with the presence of evil. If the evil is not powerfully present, how can the victory of good over evil have meaning?

There is one final example of masking that may further illustrate how Native Americans commonly see the double nature of masking, what we are thinking of as play. Hopi children are carefully protected against seeing the masked kachinas, spirit messengers, without their masks as they are protected against

seeing masks not in use. They understand the kachinas to be exactly what they appear to be, spirit beings who come to Hopi bringing rain, food, and life. At the age of eight to ten, children are initiated into the Kachina Cult and thereupon formally begin their active religious lives.

The climactic event of this initiation rite is when the children are invited into a kiva, or ceremonial chamber, to witness a dance they have never before been permitted to see. The kachinas enter the kiva climbing down a ladder extending into the kiva from a rooftop hatchway. As the kachinas appear they come without masks. The children suddenly recognize their male relatives and neighbors. Many experience this event as a horrible disenchantment. They feel the adults have lied to them and they wonder whether they will ever be able to trust them again. In a short time, of course, all of these children are involved in the practice of Hopi religion. The boys will soon begin to be maskers themselves.

What I believe is remarkable from the perspective that we have been developing here is that this disenchantment is structurally parallel to a demonstration that the mask and masker must always be understood as a field of interacting play. It is difficult to imagine how the distinction between masker and masked identity could be more dramatically established than in this initiation event. All the more remarkable is that by conjoining this revelation with the initiation of the formal religious life, it must be concluded that the Hopi recognize the religious importance

of the play between mask and masker. Though the children feel they have lost something of the truth; they will soon experience that it is in this field of play, in the gap between mask and masker, that Hopi religious life is experienced.

What then is the significance of seeing Native American religions at play? While I have illustrated the play of Native American religions primarily through ritual masking activities, I think the idea of dynamic structurality, as teased out of Schiller's view, pervades Native American religions and has done so throughout their long histories. Native American religions are vital, are alive--Native American religions are meaningful and powerful--to the extent they play among the many disparate, conflicting, and mutually exclusive forces.

We are accustomed to various metaphors to describe the character of Native American religions. Harmony, as it occurs in music, may be a better metaphor than balance, though both are so often used. Musical harmony requires the interplay of wave patterns that modify one another to produce a whole array of overtones. Harmony occurs through the entrainment of separate sounds, not through their resolution into a single tone. Sound is always in process, always coming into being and passing away, always creatively interacting with other sounds. Sound is impossible to freeze or stop without losing it all together. Various notes when played together, interact, encourage entrainment, produce living form, or Beauty as Schiller put it,

but only because there are gaps, differences, between the tones that are made to interact. it is in these gaps that not only Native American religions, but all religions, exist. Only here is there the potential for play, for vitality.

Indeed, the notion of gaps suggests an even more provocative metaphor that opens us to the dynamics and vitality of Native American religions. So where, beside maskings, are these gaps to be found? Mythology and ritual, by their natures, create gaps. They are distinguished by their being at once apart from what seems necessary to life and the basis for all reality, essential to a meaningful life. Many views of mythology and ritual understand them as guidebooks, charters, or paradigms for proper living. In this view the religious objective is to diminish the gap between life and these religious forms. Any disparity between the two is somehow a human failing. I think it is much more fruitful to see mythology and ritual as, even by their natures, forms that create gaps. To acknowledge the very character that distinguishes myth and ritual is at once to acknowledge a gap between them and life as lived. Again we have echoes of Schiller's distinction between the formal and the sensuous. The gap created between myth and the physical world, between ritual and non-ritual life affords human beings the playground in which they may play out their destinies. To close the gap, to live in myth, to make every act a ritual act, is tantamount to destroying human life altogether, certainly it would be the end of religion.

While I believe that to view religion from the perspective of play may serve to illuminate the religious vitality of all human beings, there are many signs that Native Americans have very playful religions. Among the religions of the world, few have so elaborate or extensive a use of masking. Native Americans incorporate, in some of their most important religious ceremonials, the performances of clowns. The story traditions about fools and tricksters are widely understood as essential to the proper development of life. The ritual arts are rarely confused with the fine arts, though in form they may be indistinguishable.

Their religious value is assured in widespread practices of destroying ritual art in its use or after it has served its purpose. Navajos never keep sandpaintings nor even allow them to be photographed. Pueblos whitewash and repaint kiva walls, so richly decorated every season with murals. Yaquis burn the Chapayeka masks. Ritual masks are carefully stored by the Pueblos and in some cultures, the Seneca for example, masks are fed and considered to be alive. Pipes are disassembled and kept in bundles. Of course, many Native American cultures have developed craft arts that parallel these ritual arts, but most make very clear distinctions between objects made for sale as crafts and authentic ritual art forms. Such acts assure that form does not appear alone, but that it is always conjoined with the sensuous. It is in the interplay that these objects are religiously powerful, that they become truly beautiful.

In a wonderful passage, Annie Dillard, captured this idea of the religious importance of gaps. It seems to me a fitting metaphor for the play, or the structurality, that derives from Schiller.

Ezekiel excoriates false prophets as those who have "not gone up into the gaps." The gaps are the thing. The gaps are the spirit's one home, the altitudes and latitudes so dazzlingly spare and clean that the spirit can discover itself for the first time like a once-blind man unbound. The gaps are the clefts in the rock where you cower to see the back parts of God; they are the fissures between mountains and cells the wind lances through, the icy narrowing fiords splitting the cliffs of mystery. Go up into the gaps. If you can find them; they shift and vanish too. Stalk the gaps. Squeak into a gap in the soil, turn, and unlock--more than a maple--a universe. This is how you spend this afternoon, and tomorrow morning, and tomorrow afternoon. Spend the afternoon. You can't take it with you.'

Endnotes

1. Frank Hamilton Cushing, "My Adventures in Zuni," Century Illustrated Magazine 25 (1882). Reprinted in Jesse Green, ed. Zuni: Selected Writings of Frank Hamilton Cushing (Lincoln: University of Nebraska Press, 1979), pp. 47-8.

2. Friederich Schiller, On the Aesthetic Education of Man, edited and translated by Elizabeth M. Wilkinson and L.A. Willoughby (Oxford at the Clarendon Press, 1967). The standard for citing Schiller is to refer to Letter in Roman numerals and paragraph in Arabic numbers. All following quotations use this citation convention and are from Wilkinson and Willoughby's translation.

3. Jonathan Z. Smith, "Map is Not Territory," in Map is Not Territory (Leiden: E.J. Brill, 1978).

4. Annie Dillard, Pilgrim at Tinker Creek (New York: Bantam Books, 1974).

Trade in America in 1492

by
Francis Jennings

I have recently re-read Mark Twain's great book Life on the Mississippi and I was once again cast under the spell of his description of what a steamboat pilot needed to know about the river's ever-changing currents and banks. But Twain's historical chapter was wrong. Under preconceived racial conceptions of European uniqueness, Twain insisted that the Mississippi had seen no commerce until René LaSalle came along. We cannot fault Mark Twain personally for this misconception. It was standard in all the histories of his day and still is in some textbooks today.

Archaeology tells us otherwise. Artifacts found in the earth from Wisconsin to Louisiana testify that the Mississippi was Main Street for a thriving canoe-borne commerce. A legend of the Natchez Indians places the beginnings of that trade somewhere about 800 or 900 A.D., three-quarters of a thousand years before LaSalle sighted the river, and the same legend tells us that the traders were one or more colonies of the Toltec Indians from Mexico who established themselves in key positions among indigenous peoples along the river. In their new habitat, these colonizing traders have become known to scholars as Mississippians. I must add that some scholars reject or ignore the evidence of the Natchez legend and therefore deny that Toltec colonization occurred, but I think those Natchez Indians knew where they came from. Indeed, there are

grounds to believe that other Mexicans had preceded them to North America by thousands of years to establish a colony at Poverty Point in Louisiana, but that long ago no European was around to write down their story.

Another legend--this one from the Delaware Indians--tells us that the upper range of the trade came to a violent end at about 1300 A.D. when Delawares from the Northwest allied to Iroquoians coming up from the South to drive the Mississippians downriver. An Iroquoian legend preserved by the reputable scholar Arthur C. Parker confirms the Delaware memory. Archaeologists agree that the Mississippians withdrew downriver at about that time, but the archaeologists, like the historians, have disregarded tribal legends.

Regardless of the details, the existence of the commerce is beyond argument. It's entire span occurred long before 1492, but it seems pertinent to present concerns that this Mississippian trading network was part of general busy commerce that existed all over North America in various forms long before Columbus arrived. And not only in North America, but in South and Central America also, and in the islands of the Gulf of Mexico.

We are so accustomed to think of Indians as a homogeneous lot of savage hunters that we must make a special effort to visualize the great variety of their communities and cultures. Indians planted as well as hunted. Some lived almost entirely from the Sea. Before European invasion, most Indians lived in great cities in Mexico and Peru. Some lived in valleys, others on high

mountains. Some lived in woodlands, others on prairies, and still others in arid regions where little rain fell throughout the year.

Each community developed a culture adapted to its special environment, each made use of available resources, and each produced goods different from those of peoples in different environments. It followed naturally that each exchanged its surplus for goods it could not produce itself.

There were many processes of exchange. The most famous and impressive one has come down to us from eyewitness reports of the conquistadors who accompanied Hernando Cortes. His veteran follower Bernal Diaz wrote, "There were soldiers among us who had been in many parts of the world, in Constantinople and Rome and all over Italy, who said that they had never before seen a market place so large and so well laid out, and so filled with people." (pp. 150) Every day of the year, great tides of goods flowed into and out of Tlatelolco, the sister city of Tenochtitlan, brought by porters and canoes. The goods were laid out in the market in sections allotted to each type, and inspectors patrolled regularly to make sure that all was orderly, and to guard against cheating. Judges were always on hand, and sentences were summary and drastic. There was no funny business in this market.

Most of the food for the twin cities came through this great market because the cities would not possibly produce enough themselves to feed their dense population which has been estimated at 200,000 to 250,000 persons. The market was part of a system of supply. Food was brought from great distances by porters called

tlamemes. We must remember that the Mexicans had no work animals nor wheeled vehicles; everything came on the backs of men whose occupation was hereditary. These porters typically carried 50-pound packs at the rate of 20 miles per day. They marched over roads prepared and maintained for their use, and they rested overnight in hostels kept for them by local communities. When they arrived at the shores of Lake Texcoco, they might continue on causeways to the island in the center of which the twin cities stood, or they might shift their burdens into canoes for the last segment of their journey.

Some of the incoming goods was tribute demanded by the Aztecs from subject peoples. For the rest, the city people paid through barter, exchanging the products of their crafts which the porters picked up and took on their return journey.

The whole system was elaborately organized and constantly under supervision. Not only was it in sharp contrast to stereotypes of Indian savages; it exceeded anything of its sort in fifteenth century Europe. The city of Rome, at about the time of Columbus's great voyage, had a population probably not greater than 30,000, with irregular arrangements for food and protection. The Aztecs, to repeat, maintained twin cities of 200,000 to 250,000 population, and did so with great regularity.

Farther south, the Incas of Peru organized different systems of exchange. They faced the problem of living on the steep slopes of the Andes Mountains where production was determined by height above sea level. On the cold heights, llamas and alpacas were

grazed. On a gradient farther down, potatoes were cultivated--some 2,000 varieties of potatoes. Still lower grew beans, squash, and other vegetables. Lower still, maize and cotton; and at the bottom were fisheries. In such a situation, lateral exchange was pointless because at any level the same goods would be produced from side to side. The need was to exchange up and down the mountain.

This problem was solved by a system now called "vertical archipelagoes." A family with headquarters halfway up the mountain would send out little islands of kinsmen to live and work above and below. Instead of taking their produce to a market, they brought it back to the central homestead where all was divided up so that each kinsman got a share from every level. In effect, the family was its own market. This system has lasted, in a modified way, down to the present day.

The system was invented long before the Incas, but they seized upon it and regulated it under their government's supervision and for their own profit. The Incas were very jealous of any sort of independent activity. To keep their empire under control, they built a system of roads with two main highways running laterally--one high, one low--from one end of the empire to the other; and they connected the two main roads at intervals by vertical by-roads.

The total length of this highway system is estimated at 25,000 miles. It far exceeded the much-praised system of ancient Roman roads in Europe, but as with the Aztecs the Incas had no wheeled

vehicles. In that respect the Roman roads were superior. The goods carried on the Inca roads were not taken by merchants. They were carried by porters under supervision of Inca officials and stored in official warehouses for use by marching armies or to be transferred where shortages had occurred. Accounts were kept by officials who used a code of knots tied in variously colored strings. We have lost the code, unfortunately, we are unable now to count the Inca's goods.

I have stressed Inca demands for control, which were genuine, but hints exist in surviving sources that some exchanges may have escaped control. At the bottom of those steep mountains lived people accustomed to getting about on the ocean, and it has always been easy for fishermen to smuggle. (It still is.) It is also true that smugglers are not inclined to keep incriminating records, so we have to guess about what was carried alongshore between Peruvian coastal communities, and especially the communities of Ecuador where trade had thrived long before the Incas came along. There are hints also of trade from Ecuador down the vast river systems of the Amazon and Orinoco basins. Little is known of this, but it has been proven possible by a Spanish party that traveled by boat all the way from Ecuador down the Amazon to the Atlantic Ocean.

However, there was certainly trade, and probably some migration also, between Ecuador and Mesoamerica. Some of this may have been by sea. We know about trade by sea from Mesoamerica over the long coast of northern South America. We are quite sure of

this because Christopher Columbus and his companions saw large fleets of canoes.

There is less certainty about regular trade between the mainland and the West Indies islands, although some sort of communication existed as is shown by ball game courts all the way from Copan in Honduras to Puerto Rico. It was the same game. Spaniards saw the game played in the islands, and their reports correspond to the recorded descriptions of the Mexicans.

Some contacts existed also between the great island of Cuba and the long peninsula of Florida, but the Timucua and Calusa Indians of Florida seem to have been hostile to the Arawak and Carib Indians of the islands so there is no evidence of regular trade between them.

Real trading went on along the long northern coast of the gulf of Mexico, from Texas to Florida. Once again, it originated in the teeming cities of Mexico which sent out pochteca members of the merchants guild. They took with them images of their long-nosed god Yacatecuhtli, and dropped some of the images along the way, perhaps because some merchants were killed and robbed by hostile people. Trade was not always peaceful. At any rate, Yacatecuhtli tells us where his devotees had been.

It is thus very clear that the Mexicans had acquired knowledge of the Gulf Coast of modern United States many centuries before Spaniards or Frenchmen explored it, and, as we shall see, they conducted extensive trade north of their city-states with the peoples of the American Southwest. First, however, let us look at

how some of them penetrated far to the interior of North America by way of the Mississippi River and its tributaries. How it would have fascinated Mark Twain to learn of the fleets of canoes on the Mississippi nearly a thousand years before the steamboats he loved so much.

An oral tradition of the Natchez Indians preserved the history. It was recited in the eighteenth century by the "keeper" of the Natchez temple in Louisiana to Antoine Simon Le Page du Pratz, and we are very lucky to have it because within a few years the Natchez tribe was wiped out by trigger-happy French soldiers. Later yet, in 1758, Le Page du Pratz got around to publishing the tradition which had been confirmed to him by the Great Sun ruler of the Natchez. Here is the tradition, as given to him by the temple priest.

"Before we came into this land, we lived yonder under the sun (pointing with his finger nearly south-west, by which I understood that he meant Mexico); we lived in a fine country where the earth is always pleasant; there our Suns [Mexican rulers were called Suns] had their abode and our nation maintained itself for a long time against the ancients of the country, who conquered some of our villages in the plains, but never could force us from the mountains. Our nation extended itself along the great water [Gulf of Mexico] where this large [Mississippi] river loses itself; but as our enemies were become very numerous and very wicked, our Suns sent some of their subjects who lived near this river, to examine whether

we could return into the country through which it flowed. The country on the east side of the river being found extremely pleasant, the Great Sun, upon the return of those who had examined it, ordered all his subjects who lived in the plains, and who still defended themselves against the ancients of the country, to remove into this land, here to build a temple, and to preserve the eternal fire.

A great part of our nation accordingly settled here, where they lived in peace and abundance for several generations It was not till after many generations that the Great Suns came and joined us in this country."

The customs of the Natchez confirmed their Mexican origin, beginning at the top with the mere existence of the omnipotent Great Sun (so different from the forms of government in most other North American polities) and ramifying down through a highly stratified social order. But we must remember that the Great Sun did not immigrate "till after many generations." This Great Sun had been preceded by others during all those generations. A combination of historical tumults in Mexico and archaeological evidence in North America leads me to believe that Toltecs began building their platform-topped pyramids along the Mississippi at about 900 A.D., give or take a century. Some archaeologists accept this view. Many do not, but those who oppose it have no positive evidence to set against the massive evidence of those pyramids.

Their distinctiveness must be understood. Earthen mounds were raised across much of the northern region of North America, but

they were built in almost any shape except pyramids, and they were not topped by platforms. Their function was to honor the dead buried within them, and probably also to serve as markers of tribal territories. They did not function to support temples and administrative headquarters in the fashion of the Toltec-Mississippian pyramids.

Suppose we consider the continent as of about A.D. 1200 because this was the time of maximum influence of Mexican cultures upon the peoples north of Mexico. It may properly be called "Classical Indian America" in comparison with the Roman Empire and Classical Europe, but with this qualification: unlike Rome, the Mexicans lacked centralized government with professional legions under command; Aztec warriors were a militia that could not be sent great distances like those Roman legions. However, as with Rome, the Mexicans had dense populations living in cities in sharp contrast to the rural peoples farther north. Romans and Mexicans alike scorned as "barbarians" the rural peoples of the north.

But the barbarians in both cases were deeply influenced by the urban peoples' advanced technology and commercial networks. Although Mexican cities lacked military technology to conquer the distant barbarians by armed force, colonies of Mexican Toltecs were able to acquire commercial ascendancy in the Mississippi Valley, much of the Mississippi tributary valleys, and a vast region between the Mississippi and the Atlantic Ocean. This is the immense sprawl over which the flat-topped Mississippian pyramids were built and have been identified. From these pyramids the

immigrants directed a systematic network of trade, aided by their cultural innovations, especially their superior methods of cultivating maize. This marvelously productive "Indian corn" served as the staple of trade for the Mississippians.

Archaeologists have established the fact of trade all along the routes marked out by those Mississippian pyramids. At the center of this trade was Cahokia, across the Mississippi from St. Louis. The people who lived at Cahokia built a giant pyramid, emulating those in Mexico, that still stands 90 feet high after 500 years of erosion. At peak population, the community dominated by it numbered between 20,000 and 40,000 persons, depending on who estimates. Its importance has been recognized by the United Nations which has designated it as a monument of world historical importance, and the State of Illinois maintains a park there, open to visitors and equipped with a museum. I strongly recommend visiting.

Mississippian trade reached a high point, but it was by no means the beginning of trade between the peoples of North America, nor did it ever establish a monopoly. Soviet and Smithsonian scholars, working in cooperation, have established exchanges of goods between the peoples of Siberia and Alaska enduring through thousands of years. The peoples who migrated down the coast and into the interior swapped valuables everywhere they went by various devices.

At the narrows of the Columbia River called The Dalles, Wasco-Wishram and Wayam communities acted as markets for traders who came

from hundreds of miles in every direction. Here the basic staple was salmon, throngs of which came upriver to spawn. They came in such vast numbers that the Indians easily caught supplies greatly exceeding their own needs. They dried the surplus and used it as their trading capital. This seems to have been a very ancient and long-lasting market, and obviously it was beyond the influence of Mexico.

Some of the traders who came to the Dalles seem to have been peddlers who shuttled from the market place to gatherings of semi-nomadic hunting tribes. Customarily, the far-wandering bands of these tribes would congregate at arranged assembly places in the summer. Ethnologists call this special kind of gathering the Rendezvous, and note that it functioned for rituals of tribal unification, for courtship and marriages, for general recreation, and for trade. To these rendezvous came peddlers from the permanent markets to exchange fish and farm produce for the hunters' hides and meat. Special crafts went in both directions. Again, we feel sure that the rendezvous was a very ancient institution.

The basis of all trade was exchange of surpluses, and such exchange could become regularized in ways that astonish modern Americans with our dependence on wholesale and retail divisions of function. There were no supermarkets in Indian America, but that lack did not imply that every family was, or could be, self-sufficient. Contrary to the notion that every tribe was constantly at war with all the others, tribes often worked out special

arrangements with trading partners for which relations of peace were prerequisite. As example we may note the partnership between the Hurons, who planted surpluses of maize, and the hunting and fishing Nipissings who lived too far north for planting. These two peoples understood their mutual usefulness so well that when winters became too bitter, the Nipissings would come south to live through the season with Huron hosts. Incidentally, something of the same sort happened across the continent in the American Southwest where Pueblo peoples hosted refugees from the bitter winters on the Great Plains. When the Plains families could go out to hunt again, they did business with the Pueblos, exchanging meat and hides for farm products.

As a general rule, maize was the great staple in trade, although many other kinds of goods were also exchanged. In the American Southwest, some people came north out of today's Mexico, apparently out of the Sonora Desert country--and settled around the Gila River. They not only planted maize, they dug and equipped hundreds of miles of irrigation canals. By equipped, I mean that these Hohokam people installed sophisticated control gates for holding the water back or turning it on. Those canals were not just ditches. Some of the main ones were eight to ten feet deep and six feet wide.

Hundreds of miles farther north, the people of Chaco Canyon also practiced irrigation though seemingly not as spectacularly as the Hohokams. From Chaco Canyon, we can still map the roads radiating to outpost villages and lookouts; and the adobe apartment

houses of Chaco Canyon were the most elaborate and largest things of their kind in North America until the nineteenth century. Chaco Canyon is near the Four Corners where our states of Arizona, New Mexico, Colorado, and Utah meet. To the north lies the region of the Great Basin in which the aboriginal people hunted and gathered for a living. Great Basin people did not plant. Chaco Canyon was the farthest limit in the Southwest of Mexican-style maize cultivation.

But the Mississippi Valley was a different matter. Maize was planted there as far north as the Mexican colony of Aztalan near Lake Mills, Wisconsin, and neighboring tribes along the Mississippi acquired the skills for its cultivation. Among them were the Mandans who later migrated to a place high on the Missouri River in our state of North Dakota. The Mandans, who spoke a Siouan language, planted large fields and created a market that drew customers especially from the far Northwest. All accounts agree that the Mandans were skilled traders, and when Europeans showed up, the Mandans eased into trade between Europe and the tribes without any apparent difficulty. They set up special entertainments for their customers in the manner of fairs, and they provided call girls for some of the weary gentlemen coming in from the prairies. How civilized can you get?

The Mandans and their allied Hidatsas continued to dominate trade on the Missouri from precolumbian times down to early nineteenth century when they finally succumbed to Sioux enemies and smallpox, mostly smallpox.

Maize cultivation spread throughout the Southeast and up as far as the State of Maine where it was finally stopped by the climate. Archaeological technology has advanced so far that we can now locate maize by finding and testing pollen even though no other parts of the corn have survived. But maize, as important as it became, was far from being the only material in the trade. Long before maize became prominent, other goods were being carried and exchanged all across the continent. We cannot be so precise about markets and routes in those early years, but we have found crafted objects in burial mounds that could not have been made locally. For many generations, custom decreed that persons of note should have prized possessions buried with them, and these grave goods were often durable. Also they were especially valuable when imported from exotic distances.

We are able to get some notion from these grave goods of the cultures as well as the trade of precolumbian peoples. They require us to discard myths about those early Indians being all alike, living uniformly by hunting and fishing, and having societies undifferentiated by social classes. Many graves show evidence of stratified societies that buried ordinary people without much fuss, but filled the graves of great chiefs with valuable exotic ornaments. Sometimes, indeed, wives and servants of the great chief were sacrificed and buried with him, just as the ancient Egyptians used to provide such retainers for the comfort of their pharaohs in the hereafter.

Our present concern is with the graves' evidence of trade, and how it can be interpreted. When copper implements or ornaments are found, they came from the ores in northern Minnesota. Turquoise came from Arizona, and jasper from a still preserved park near Allentown, Pennsylvania. The obsidian often used for sharp-edged weapons can be traced to its precise source because each obsidian mine has distinctive markings under X-rays; when we find an obsidian spearhead a thousand miles from where it was extracted, we know it must have been an object of trade, and other evidence may make it possible to trace the route from source to destination.

Sometimes northern graves contain woven cloth. Since looms were not part of northern cultures, we trace the cloth back to one of the Southwestern peoples who traded to Mexico where cotton cloth was common. As the Southwesterners had themselves learned to weave on looms, the cloth may have originated with them.

There was much trade in sea shells that had been worked on by silver smiths and other craftsmen. Craft workers in silver existed in Mexico long before Spaniards entered, and the skills were taken to the American Southwest. Those Hohokams mentioned a moment ago had a regular trail from their Gila River base to the Gulf of California. Segments of the trail still exist, and an archaeological detective has spotted the particular designs used to mark rocks at water holes. When the shells were brought back to the Hohokams' Snaketown, craftsmen there made the shells into objects of beauty that brought customers from great distances.

Pueblo descendants of the Hohokams and the Anasazis of Chaco Canyon became central to trade from the south as well as the north. We have found objects in the ruins of long-abandoned communities that are clearly identifiable as Mexican by origin. Pueblo trade continued after Spanish conquest. Despite terrible losses in population, survivors adapted and added Spanish goods to their exchanges with the peoples farther inland; but more important than their adoption of Spanish goods was their adoption of Spanish domesticated animals--especially horses and sheep. Outlying Apaches soon altered their own culture to depend heavily on horse-stealing, and we know how the formerly sedentary Plains peoples became "horse Indians." Navajos learned from the Pueblos how to raise sheep and weave wool. Tongue in cheek, a Pueblo friend remarks, "We civilized them."

Everywhere one turns, the peoples produced something for exchange. Even the Pimas who wandered from one water hole to another until each one dried up, managed literally to scrape together supplies of salt from their arid lands. With this, they bargained for delicacies and essentials from more fortunate neighbors. In more modern times, the Osage Indians of the Red River Valley set up a salt manufactory.

Such data are only the beginning of understanding. Until yesterday, so to speak, no scholars were interested in trade previous to the arrival of Europeans, and all the literature about traders is writing about European trading posts, French coureurs

de bois, American "mountain men," and so on. Now that serious research is under way, we may confidently expect more revelations.

As with all other knowledge about precolumbian peoples, we have no written sources and must therefore depend on the work of archaeologists and "upstreaming" anthropologists as well as linguists who trace the movements of peoples by clues in modern languages. As a sort of sideline, these linguists have identified several trading jargons for use between peoples with different languages, much as varieties of pidgin English function today in many parts of the world. We all know of the silent sign language by which different tribes of Plains Indians communicated. Along the coast of the Gulf of Mexico, a "Mobilian" trade jargon has been identified and studied. It probably had its origin during the great days of the Mississippians. A Delaware jargon has been spotted in the east. Probably there were others that I do not know about. It seems almost impossible that the great markets at Mandan, the Dalles, and among the Pueblos could have functioned without some sort of common communication system.

When all this has been said, it is still essential for a student to recognize that exchange among Indians differed from European commerce in vital ways. Indians conducted all their trade by barter; they had no money, and this fact implied many others. It is true that the Mexicans had an "almost money" sometimes used in their markets. This consisted of goose quills filled with gold dust, but these substitutes for the real thing did not have the homogeneity nor the lasting qualities of minted coins. Farther

north, we know of nothing like them with certainty. The famous wampum of the Northeast became a sort of money after the founding of New Netherland and New England, but many anthropologists insist that wampum in precolumbian times was used only for ceremony and ritual. De Soto's Spaniards found quantities of pearls in Cofitachiqui that may have been used in exchange, but they stole the pearls and destroyed any possible evidence. We just don't know. What we do know is that barter occurred everywhere.

Perhaps I should add that barter incorporated European conceptions that did not always correspond to Indian ideas. Many of the North American tribes--perhaps all of them--practiced what is technically called prestation. They did not sell goods, they gave presents for which it was expected that goods of equal value would be presented; and there was no objective standard of value corresponding to our money of account. We have to assume that broad hints accompanied each present.

Such practices were well known in Indian cultures. Benjamin Franklin tells an amusing story about Onondaga chief Canasatego and Pennsylvania's interpreter Conrad Weiser. Canasatego told Weiser of a dream that Weiser had presented him with a good gun. Weiser knew what was expected and came up with the gun, but he also had a dream. He told Canasatego that he dreamed the Indian had given him an island in the Susquehanna River. Crestfallen Canasatego lived up to the requirements of custom, but he called a halt to his losses. "Conrad," he said, "let us dream no more together."

It seems altogether credible that trading Indians dreamed also, or found some similar means of conveying their expectations.

We are not sure about the procedures for early exchange which probably varied from place to place. It seems that some tribes first traded as corporate entities. Peace having been established between them, the chief of Tribe A would give presents to the chief of Tribe B who reciprocated. This sort of exchange continued into recorded times as a means of confirming good will. I have seen treaty minutes that tell how English negotiators took pains to make their presents more valuable than those of their Indian counterparts. It was a way of showing how much wealthier and more powerful the English were.

However, I think it would be mistaken to assume that all exchange took place in this formal, official manner. Such procedures are not easily reconciled to the busy markets of the Pueblos, Mandans, and Dalles peoples. Though precise evidence is lacking, I have to assume that at such places individuals came to trade on their own account. We know of such individual business in recorded times when canoes full of Hurons came to Quebec and each man in each canoe knew which goods were his personal property. Perhaps this was a change from aboriginal times--I simply don't know--but when the French made records the Hurons were a tribe of traders rather than a trading tribe.

The situation seems to have been different in the Southeast where ethnohistorian Richard White describes how Choctaw chiefs dealt with Europeans in behalf of their whole villages, and

received goods reciprocally. Much of a chief's personal power derived from his right to redistribute trade goods among his villagers according to his own notions of what each deserved. Naturally, he favored his most loyal followers, and equally naturally his largesse created loyalty. It seems likely that this was a custom carried on from prerecorded eras.

It may be safe to assume that tribes differed in this respect as in so many others, but they all lacked money until Europeans introduced them to it. This lack implied limitations on borrowing and debt. Without simple records of money of account, Indians simply could not possibly create complex records of varied debts. Borrowing was strictly one-on-one. In Mexico, poor men who sometimes failed to make ends meet borrowed from prosperous merchants; but this was a very risky business because the debtor who defaulted became his creditor's slave. No easy bankruptcy law existed there. Even more serious danger existed because merchants were obliged from time to time to offer human sacrifices to the bloodthirsty gods, and the offerings were slaves.

Farther north, Indians enslaved captives of war, but I do not know evidence of enslavement for debt. When Europeans moved in, they repeated the pattern of debt subjection so common everywhere else in the world. Again, we must thank Richard White for showing how immense debts saddled on the Choctaws in effect reduced the entire tribe to the merchants' will.

At root, the creation of such debt dependency was part of the overall process of integrating tribal trade into the grand European

market. Because this intersocietal trade is everywhere dominant in historical documents, we tend to think of it as a normal standard. In fact, it was an innovation in the Americas where intertribal trade existed for thousands of years before every acquiring any connection to that European market. One must make a special effort to see how the tribes and their members dealt with each other before the advent of Europeans, and the unfortunate truth is that almost nobody bothered to make that effort until quite recently. Historians have been under the spell of the mythical, homogenized hunting Indians who were all supposed to be self-sufficient savages. Here, too, we must differentiate between myth and reality. Until Europeans introduced their insatiable market, Indians hunted enough for subsistence except where they had Indian markets for a surplus. When the hunters had enough they stopped. The perpetual hunter of mythology was a man caught in the demands of the European market. He was a commercial hunter.

Acknowledging this fact, we must still distinguish Indian commerce from European commerce in one crucial respect. Europeans engaged in business not only to become wealthy, but, by the magic of money, to transform wealth into capital. Precolumbian Indians did not have money, and they did have a cultural imperative opposed to capital formation. When an Indian became rich, as some did in a comparative sense, strong custom required him to share out his riches. Thus, when Europeans came to trade with Indians, the relationship was loaded in favor of the Europeans accumulating the

capital that was power while Indian traders satisfied current needs and redistributed surpluses to their kin.

We have been pushed into recognition of precolumbian intertribal trade by the persistence of archaeologists who realized that the artifacts they were finding in specific locations must have come from somewhere else. Anyone who doubts historians' backwardness in this respect needs only to pick up a college textbook on American history. The vast networks of intertribal trade just ain't there.

Yet, even on the racist assumptions of so many texts that the only history worth noting is that of Europeans and their descendants--even on such assumptions the precolumbian intertribal trade is profoundly important on several scores. Because the Indians had been accustomed to trading with each other, Frenchmen, Dutchmen, and Englishmen were easily able to establish footholds and acquire allies in this land so strange to them. Through the trade, Dutch and English colonists paid the costs of colonization, and made a profit to boot. Their governments did not finance this so-called transit of civilization. European trading posts and markets invariably were set up at places where Indians had been doing business for centuries earlier, and these markets or posts became centers of power from which the imperialists struggled with each other. Finally, it was trade that lured Europeans to the interior of the continent, and their Indian guides took them there over well-trodden (and paddled) routes.

All of this is by way of preaching that the time has long passed for historians to forget their mythologies and to pay serious attention to the histories of the peoples who were here first and longest.

The Northeast Woodlands in 1492

by
Dean R. Snow

The Northeast area was on the margin of aboriginal America in 1492 and that is where it remained until the early seventeenth century. At that time European contact with the Northeast brought it into center stage by simply moving the focus of what was really important in the history of the continent.

Looking at the Northeast in terms of physiography, I can provide two or three quick ways of understanding what the region is about. The New England uplands are east of a line that is approximately the eastern boundary of New York, and one notices that Algonquian speakers lived principally to the east of that line. New York, except for the Adirondack Mountains north of Albany is mostly made up of sedimentary rocks. If one looks around the southern border of New York one sees that it is approximately the southern limit of ice age glaciation. Its generally true that Iroquoians (the Iroquois proper and other people who spoke Iroquoian languages in the Northeast) preferred the glaciated soils north of this line, but south of the southern limit of volcanic rocks. They preferred the sedimentary bed rocks and the soils that overlaid them in areas that had been glaciated.

Archaeologists and ethnographers generally include under the Northeast region Northern Iroquoia (an area that was

inhabited in 1492 by people speaking Iroquoian languages), New England, the Maritime Provinces, and the Mid-Atlantic area east of the Appalachian Mountains, extending as far south as North Carolina. I originally developed a river drainage model for understanding how people were spread over this region when I wrote my book on The Archaeology of New England. That works very well for New England. People with names like Maliseet, Micmac, Passamaquoddy, Abnaki in northern New England tended to live along major river courses and to define their territories as river drainages. In Southern New England we have the same pattern. People that I have lumped together and called the Massachusetts lived more or less in the eastern part of the state of that name but included other groups that had names like Narragansett, Pawtucket and so forth. Further to the west of them, were other groups like the Mohegans, the Pequots, and the Mahicans (which are not the same as the Mohegan and not the same as James Fenimore Cooper's imaginary Mohicans). These peoples were all Algonquian speakers that tended to live along major river courses. In New York and Pennsylvania, however, we move into Iroquoia and, as a consequence, we are into a area where river drainages did not control how people spread across the landscape. The Mohawks lived along the Mohawk River, which is a tributary of the Hudson. But other groups, although they may have lived near rivers and lakes, defined themselves not so much by those streams and ponds, but rather in other ways. Small site clusters on a map of Northern Iroquoia define the Iroquoian

nations of around 1600, about 100 years after the target date we are examining here. Before that time, around 1492, there would have been more of those clusters, but some were abandoned during the period right around Columbus's journey. And people moved into a much smaller number of tightly packed clusters. For example, in 1492 there were five separate nations scattered north of Lake Ontario, and they all retreated to a small pocket west of Lake Simcoe. Similarly the Neutral, who had been as many as five separate nations in 1492 were, by 1600, living in a single cluster. There were other pockets in northern and western New York that were also abandoned as people moved into areas where nations survived into the seventeenth century.

I think that tribal territories that modern scholars like to scribble on maps often misrepresent ethnographic reality. The reality is that Indian life centered on villages and these in turn were nodes of political economical and social networks. If we look to early sources, for example Purchas's lists of villages and rivers in Maine in 1604, we see that he names 22 villages that these are named for 11 different rivers. He does not talk about territories at all; he talks about villages. Similarly John Smith, who was describing Virginia about the same time, describes what he sees in terms of villages, not in terms of tribal territories or national territories. This works out rather nicely for archaeologists as well because we tend to talk in terms of sites and not territories. And I think that makes a great deal more sense in that in the future we are going to see individual

village sites rather than tribal territories as the primary units of reference.

Maps plotting the distributions of Algonquian and Iroquoian languages in the Northeast make Iroquoian speech (and we here are using a kind of territorial definition) appear like an intrusion into the area. This is accurate. The Iroquois were not there from the beginning; they intruded at some point before 1492. Similarly, if one look to the east of the Northern Iroquoians, one sees a long strip of Algonquian speaking peoples that appears to have spread southward along the east coast at some point in the past. Their initial distribution was probably in an ark through Ohio, Pennsylvania, and up into the upper Great Lakes. Later extrusions southward carried some of them down the east coast.

I now think (and I have previously published information contrary to this) that the Iroquois intrusion into the Northeast occurred around AD 900. There seems to be very strong archaeological evidence for this, very strong linguistic evidence and a number of different lines of evidence coming together that all point to this. The immediate source of the Iroquoians of the Northeast appears to be central Pennsylvania, but where they were before that I am not yet prepared to say. But certainly there appears to have been an intrusion at about that time; a major disruption of the Northeast as the people who were already resident there (probably the ancestors of modern Algonquian speakers) were either absorbed or pushed out. Similarly, I think

that the east coast Algonquians who spread southward along the coast probably made that move around the same time. Now neither of those events accounts for how the Algonquians got into this region in the first place and when this happened, However, that goes way beyond the scope of what I would like to say here.

Penobscot Adaptation

The goal that I have set for myself here is to try to describe in a brief way how the peoples of the Northeast lived their lives in 1492. The story of how they got to their particular adaptive solutions over an immense period of time is fascinating but we do not have space for that here. This is unfortunately 12,000 years worth of cultural evolution. And what happened to them in the maelstrom of European contact after 1492 is also fascinating, but this too is beyond our scope here. So, with that limited objective, let us move on.

One approach to how to get through the year in the Northeast is what I call the Penobscot solution. The modern Penobscots live in and around Old Town Maine. Their ancestors have been in Maine for a very long time. Their seasonal round involves harvesting fish near the villages in March. They moved out of those villages to camps and later they moved back into the main village. They dispersed to their coastal camps in the summer. They made shorter trips as subsets of the family group after the fur trade began and after horticulture was developed. They did not practice horticulture--they did not grow corn, beans, and squash--prior to contact with Europeans, and there is a reason for that I will

come back to. They returned to the village in the fall and in the early winter they dispersed for the first hunt, which lasted from October to December. They returned to the village in December and in the late winter they went out once again to do some hunting until March.

There was near permanence of villages (ironic and counter intuitive I suppose) in northern New England in 1492, that was actually facilitated by the lack of horticulture, the lack of crops. Now that sounds counter to anything one might expect, but the point here is that they did not have crops to tend and they located their main villages according to where the fishing was best. Once they had horticulture, they had to move more frequently in order to shift their fields, because all Northeastern Indians had to use shifting cultivation techniques. And since they did not have to shift for that reason prior to the adoption of maize, beans, and squash, their villages were, ironically, more permanent in 1492 than they were later on. However, the population density of these people on the landscape, if you look at the whole state of Maine, was only about 12 people per 100 square kilometers. That is a very thin population, and they were concentrated in little pockets up and down the main rivers.

If we look at their house forms, we see that they lived in large wigwams. The numbers that Samuel Purchas provides indicate an average town size of about 48 of these structures and an average of about 130 adult males. Now, if we assume that the

adult males accounted for about 25 per cent of the population at that time, we get an average of about 520 people in one of these villages, or 11 people per house. So the houses would have been a little bit bigger than most illustrated wigwams, perhaps, but not much.

It was a mixed economy. The Penobscots practiced fishing and gathering, and they hunted in the winter. They had only 120 frost free days in the summertime. That meant that if they were going to grow corn, they had a very good chance of losing their crop every third year or so, because 120 days is marginal. They could not afford that kind of risk until they gained access to trade with the Plymouth colonists and other Europeans. They gained access to a trade network that would supply them with corn, beans, and squash in years when their crops did not make it. So that is why horticulture was not developed earlier and why they did not adopt it until after they were involved in long distant trade with Europeans. On the coast of Maine, of course, the growing season is a little bit longer, but there were other reasons why growing corn there was not fruitful.

Birch bark canoes made travel in the interior very easy in relative terms, as compared to when families have to trek overland. The traditional territories that they moved into in the wintertime became family hunting territories when the fur trade began after about 1550. Political leadership of these people was dependent upon big men. Usually they rose from leading families. They tended to be individuals of great charisma and

personal power, the kind of people we seem to be looking for in our presidential elections and cannot seem to find. People who had this kind of charisma--the men who had charisma and political power--also had personal charisma that expressed itself in other ways. They tended to be men that could transform themselves into two or more nonhuman forms. As shamans they could turn themselves into eels or foxes while they were in trances. They were also the men also had multiple wives. So they were powerful and potent in a number of ways, and all of these expressions of power were conceptually tied together in a bundle. They asserted their power normally on the village level only, however, and we do not see much in the way of larger political organization, although occasionally one emerged. There was a man named Bashabes in the early 1600 who was a very potent individual, and everybody along the coast of Maine kowtowed to him. But the Micmac killed him around 1616, and that was the end of that.

I should point out, that archaeologically there has been a tendency to overestimate the importance of shellfish in this economy. There is a 20 foot deep pile of oyster shells along the Damariscotta River on the central Maine coast. If, however, one figures out how long they were piling up oysters shells here and how many people were involved, this amounts to only a few meals of raw oysters per year per person. So Champlain is probably correct when he points out to us that shellfish, clams, oysters, and other shoreline resources, were a winter starvation food, something one ate when one was desperate for food, not something

that was a delicacy or even a staple as some people have suggested.

Massachusetts Adaptation

If we consider the Massachusetts, we see a very different kind of seasonal round. Here we have task groups going to fishing stations in March as we do in northern New England. But they dispersed in family groups to farmsteads in late May, because these people were horticultural at the time of Columbus. Occasionally task groups would go to coastal camps in June and July to fish. Task groups also went to fishing stations in September and families returned from their farmsteads to the villages after the harvest in October. Then the males would go out in the wintertime to hunting camps in order to get deer and other game.

The population density supported by this kind of solution of to how to get through the year was about 200 per 100 square kilometers. That is up from 12 per 100 square kilometers in the Penobscot case, a tremendous difference in population density between northern and southern New England.

The favorite spots for villages at this time were the heads of tides along the Merrimac River, the Connecticut River, and other rivers like that. Unfortunately, these are very same places that modern cities like Concord and Hartford have been planted, and as a consequence the archaeological evidence is scarce. In New England it is very difficult to find evidence of Indian villages from the Columbus era simply because the sites have been

destroyed by later European settlements.

In 1524, Verranzano described the basic house as being about 15 spaces across, and that suggests an elongated rather than round wigwam. The houses were up to 30 meters long and 9 meters wide and they held as many as 40 or 50 people. The basic family unit was probably patrilocal. That is to say that the male principle was involved in finding residence for people after they were married. But, it might have been matrilineal in some cases. We are not really sure of this because the evidence is very skimpy. Farmsteads were occupied by nuclear families and small extended families.

Watercolors from the John White series show fishermen in dugout canoes, and it is probably not unreasonable to infer these for southern New England. However I should point out that deer, not fish, constituted about 90% of the meat protein these people were taking in. Deer were also very important for their hides. So, the deer population was an important resource, perhaps even a critical limiting resource, in the region. One could only allow the population to get as big as it could get without over-taxing the deer population. Otherwise one would run out of hides and a certain number of hides was needed per family per year to get clothing.

Iroquois Adaptation

I now move on to the Iroquois solution, which is closest to my heart these days. Under this strategy people lived in the village year round. Women, children, and elderly people remained

in the village year round. The men moved off to special camps and trapped and fished in March. The men might move off to fowling camps to take water fowl or passenger pigeons in May. And the men moved to early winter hunting camps in November. There is a midwinter ceremony in January or early February that is still very important to Iroquois. When the stars are positioned properly at sundown, the Iroquois know that it is time to come back for this particular ceremony. It lasts for several days. It is still practiced, and it is a very important event in the calendar. After that was over the men would go off again for late winter hunting trips in late January. So there was a residential population in an Iroquois village all the time, but the men were frequently gone.

Warfare was also important, and the men were often off raiding for months on end. The Iroquois spent a lot of time traveling in 1492 and warfare was one of the primary reasons for that travel.

By 1492 the Iroquoians were living in chiefdoms. I am using "chiefdom" in a special way. I am defining it as two or more levels of socio-political integration. Some people define chiefdoms in economic terms and if one does it that way the Iroquois do not qualify. They did not have elaborate economic exchange or redistribution systems. But they did have at least two levels of social and political integration. They also had hereditary leadership, but of a peculiar kind. Hereditary principles were buffered by other principles. What was really

hereditary amongst the Iroquoians were the names of leaders. These names were assigned to dominate clan segments. When a chief died another man would be identified by the women in that clan segment and he would be appointed to fill the position of the deceased chief. He assumed the name of that deceased individual. Those names still exist. There are still men who are given those names, but we may know them better by their English names. They nevertheless still carry on their offices in the traditional way. So the system is hereditary, but in a way that does not sound familiar or make sense when one thinks in terms of heredity the way we usually do in our own culture. Unlike the royal houses of Europe, this system was flexible in a crucial way. Dominant Iroquois families did not get stuck with incompetent leaders that just happened to be the oldest sons of deceased leaders. If the women perceived that there were no competent people available to fill a particular office, they might even loan that chiefly title to a different clan segment that did happen to be blessed with a born leader or two. So the system was hereditary in one sense, but it was a peculiar kind of hereditary system compared to what which we are accustomed to in European culture.

League of the Iroquois

The political structure of the villages is interesting too. Clans apparently had separate councils in each village; that is to say, in the case of the Mohawks, there were three clans that probably had councils that had meetings for conducting clan business. There was also an ad hoc village council in each

village . The clan chief in the village came from some dominant clan segment, just as the chiefs that moved on to be chiefs in the League of Iroquois, which was their great confederacy of five nations, were appointed and sent off to speak for their communities. In these council meetings a number of principles operated in way that may seem strange to us but worked rather interestingly and well. For example, very often it was arranged that the youngest person spoke first. As one moved up through the age grade one got to the end of the line and heard from the most senior and presumably the wisest person last. He was able to be the most wise because he had heard everything everybody else had said, and he if he were at all clever, he could incorporate all those thoughts into his own thoughts. The last speaker could sound very wise indeed at the end of it all. The reason why this was important was that Iroquois custom required that everything had to work on the basis of consensus. Terms like "quorum" or "majority" or "vote" simply do not fit in this political system. This accounts for why it took so long to accomplish anything. The system requires unanimity. There is not much on which to get easy unanimity in any group, so achieving it is a long drawn out process. In very many cases it ends in no action at all. However, when one does get agreement, its very well established.

If two people also use the principle that one must understand the other to the first person's satisfaction before the second can disagree with him, then a lot of discussion and (hopefully) some mutual understanding is guaranteed.

There were initially five nations in the League of the Iroquois, the Mohawks, the Oneidas, the Onondagas, the Cayugas, and the Senecas. The political structure at the league level had its own euphemisms or metaphors. The Mohawks were males or fathers, or elder brothers, or uncles, or keepers of the eastern door. The Onondagas and the Senecas were also males, fathers, elder brothers, nephews. The Onondagas kept the fire in the middle and Senecas kept the western door. The Oneidas and the Cayugas, on the other hand, were sometimes called females or children or younger brothers. This had nothing to do with the kinds of meanings that might think those terms imply. It was not a better thing to be a male than a female in this circumstance. They were simply dichotomies. They could just as easily called them red and black or white and black or whatever. The important thing was to define a natural dichotomy, and other familiar natural dichotomies were used as metaphors for the division of sides. The chiefs that were appointed to the league were 50 in number. They were appointees from each of three Mohawk, and the Oneida clans. The Onondagas, Cayugas, and Senecas had 9 clans and they had different ways of appointing these men so that there were a total of 50 in all. Since quorum and majority were not important concepts, it did not matter that there were unequal numbers from different nations, and it was also the case that it did not require them all to be there on any particular occasion. This system worked quite well.

Fifty league chiefs were suggested to Benjamin Franklin at

one point at a conference in Albany as a nice number. The Indians suggested that the colonists might want to try something like this. It did not go much further than that, although in recent years a number of people have asserted, I think wrongly, that the Iroquois had a substantial influence on the structure of the later United States Constitution. That seems not to be the case. They certainly had something to say at the Albany Plan of Union twenty years before the revolution, but this did not lead to anything.

I turn now to the longhouse, because the longhouse was and is the metaphor for the Iroquois Confederacy. There is a wonderful illustration of a longhouse that happens to be on a map that is held at the Newberry Library. To my knowledge it is the earliest good drawing of a longhouse. One can see where the metaphors are in our political system. We seem to be fixed on furniture, and houses to some extent. We have houses of Congress and we have chairs, and we table items for discussion. The longhouse is the metaphor for the Iroquois, however. We have already seen it in the way in which the League was described: the Mohawks keeping the eastern door, the Senecas keeping the western door, and the Onondagas tending the fire in the middle.

The longhouse metaphor rationalizes action in a number of ways. One can also see it in the social structure of the village. The village, itself, is the domain of women. The woods are the domain of the men. And things involved with men and women interacting occur at the edge of the woods. Important ceremonies,

like the condolence council, begin at the edge of the woods. The kinds of divisions that I talked about before--the younger brothers and older brothers, the males and the females--are also reflected on the village level. For example, in a Mohawk village the wolf and the turtle clans were seen as being on one side and the bear clan on the other side. Thus, if somebody in the bear clan died, it was the duty of the people in the wolf and turtle clans to condole those people and take care of the funeral arrangements and do the unpleasant things connected with death. It was also the case that if a game was to be played, participants would divide up along those lines. That is how the Iroquois formed their teams. They did not do it in that insidious way that we have all experienced on modern playground. We all have terrible stories about being the last to be chosen. For the Iroquois, the sides were already determined, and they made an effort to match players of equal abilities from these predetermined pools.

The Iroquois Longhouse

The longhouse structure as a physical structure was about 20 feet wide and about 15 or 20 feet high. The historic longhouses tend to be about 80 feet long, or perhaps 200 feet long at the most. There is a nice example of a reconstructed longhouse at the Lawson site near London, Ontario. It, however, is a particularly long longhouse. The record holder is a 400 foot long Onondaga longhouse near Syracuse. There was a period during which longhouses got to be very long indeed, in both Ontario and

New York. I have often wondered what it was like to go home in the evening if one happened to live in the middle of one of these things. One might have had to walk through 200 feet worth of relatives each of whom might have wanted a favor.

A few years ago the New York State Museum staff decided to build a longhouse, or a portion of one, inside the museum, and they asked me for a design. I realized at the time that I was not certain that I knew how to build a longhouse that would not fall down. So I built a model first to make sure that the instructions that I gave them would not lead to a collapse of some sort. They gave me some idea of what the framework of one of these structures should look like.

There would have been many poles having diameters of about 3 or 4 inches, such that the framework would have looked like a very large inverted basket. The longhouse had a central aisle, and there were hearths down the center of the aisle, with compartments on both sides. The compartment increments were about 20 feet so that every 20 feet one should expect to find a fire and compartments inhabited by nuclear families facing each other across the aisle. The bench that people lived on was set about a foot off the dirt floor. One has to remember that there were little children running around in there and they had to crawl up in these beds too. We also have descriptions that make it clear that the benches were about a foot off the floor so that children could crawl up as easily as adults could.

Each of these longhouses usually, or often, had storage

areas at the ends. These contained large bark drums that were used to store corn. The end storage compartment also served as what we used to call in Minnesota a "storm porch." It was a buffer in the winter time so that one had two doors to go through. This prevented cold winds from whipping directly into the main living area of the longhouse.

Remember, however, what archaeologists actually see in the ground: patterns of post hole impressions or spots in the subsoil. My students and I completely exposed one such longhouse at a site called Otstungo. This described in the October 1991 issue of National Geographic magazine. A more detailed description is in progress. I have just finished plotting 58,000 objects that came from the floor of that single longhouse.

When the fires in a longhouse were really burning, the smoke filled the air, going directly up and supposedly out the square hole in the ceiling of the longhouse. In fact, however, much of it drifted around the inside the longhouse. One of the reasons for having a very high ceiling was to keep the smoke ceiling above eye level. One of things we have learned is that one cannot have a ceiling as low as that of a wigwam unless one is willing to go around on hands and knees in late March. Even then it is very hard on the eyes. Up near the ceiling and amidst all the smoke was next year's seed corn, hanging up well away from where the raccoons could get it and waiting for the next planting season.

The men would set the poles and hang the bark from the

outside of the longhouse structures. However, the side walls were straight, and only the roof was arched. Many modern reconstructions have assumed that the entire longhouse was parabolic in cross-section, but this is wrong. Full-scale reconstructions at Crawford Lake, Ontario, are more correct in this regard. Unfortunately, in this case the roofs have been set much too high so that the reconstructed longhouses look enormous. I suspect that the reason the Crawford Lake longhouses look that way is to be found in the little drawing on the map at the Newberry Library, which was the graphic basis for the reconstruction. In that drawing the roof is shown as having a very high eaves. Also, the width of the longhouse is not shown accurately in the drawing. In fact the longhouse should be shown wider and more squat, but the very small scale of the drawing prevented accuracy at that level of detail.

It may be that the famous Iroquois false faces began as carvings on posts. We find archaeological evidence that large posts existed in most of the Mohawk longhouses at least. What we typically find near the center of one of these longhouses is a very, very large posthole, perhaps 6 inches across that was clearly a pole (I do not want to use the word totem pole). There is some documentary evidence that such poles had carved totems of various kinds. We have some very vague descriptions of these things, but not one of the carvings has survived. Thus we have no clear idea of what the poles looked like.

Work areas in the longhouse would have included areas food

preparation areas, each perhaps with a grinding stone. One we found at Otstungo was about two and a half feet across and was set aside in one part of the longhouse for grinding seed, particularly corn kernels.

So the longhouses, we are beginning to realize now, had a variety of structures and functions within them. These structural use areas had a variety of features such as storage pits, storage bins, wooden mortars, and grinding stones. They were not all like Pullman cars, which is the image one might get from some published descriptions. Inside that one personal cache pit we found a smoking pipe with a mask effigy on it. The effigy is about the size of tennis ball. Things like this were scattered all around the inside of the longhouse. The beauty of the longhouse at Otstungo was that it had never been plowed, and this is very rare in the Northeast. Most Northeast sites are on farmland that has been plowed. The material has all been jumbled over the years so that the archaeologist does not get precise locational information.

One of the characteristics of Iroquois villages is that they moved from time to time because they were required to do so by the nature of Iroquoian farming. The men cleared the fields around the villages initially and the women then planted the fields, grew crops, and harvested the crops at the end of the growing season. Over time, without fertilizer, the fields would wore out and lost their fertility. Other things also contributed to the deterioration of the situation in the immediate vicinity

of any village over time. If the village were large enough the firewood would be depleted. If the village were small enough one would have a steady supply of firewood from the woods that one left growing around the village. But, if the village population approached 2,000, it became unstable politically, and the people of such a large village would have stripped the surrounding area of firewood. The soil became less fertile with use over a decade or two. No matter what we all may have learned in grade school about the Plymouth colony, Squanto and fish fertilizer, the Indians did not use fertilizer. Not only that, but the insects and other pests that build up in any modern garden built up in Iroquois fields too. Only they did not have chemical pesticides for dealing with these pests. Thus, the only solution that they had after a generation in one place was to move the village to a new location, clear new fields and start over.

There are other reasons why they would do this. It seems to me that the garbage and human waste that accumulated around Indian villages would have become a problem. The village itself would have also become socially inappropriate. Each of the longhouses was dominated by a senior woman and the other people who lived in the longhouses were her daughters, her daughters' daughters, her unmarried sons and grandsons, and in-marrying husbands. Thus, the longhouse was dominated by a matrilineal group which would partially explain why the men were out of town so much of the time. After 20 years or so, young women who were children when that longhouse was built would have grown up and

had families of their own. I would guess that there was substantial interpersonal stress and strain in a longhouse as the family matured. Some families grew, some shrank. Some families had many daughters while others had mainly sons. Social arrangements would almost inevitably become unbalanced under these circumstances. So every 20 or 30 years or so it was probably reasonable to reconstitute the whole residential unit. The best way to do that was to move the village and start over.

Iroquois Warfare

One of the reasons the men were out of town, as I mentioned before, was warfare. It would be inappropriate to pass by without mentioning the role of warfare in the Northeast in 1492. War was assumed to be a constant condition unless it was explicitly absent for reason of alliance or other arrangements. In other words, unless two people or a network of people had an agreement that they would not kill each other, and unless they renewed that agreement periodically, they could assume that they were at war with one another as a more-or-less constant state of affairs. This was the way things worked at that time, and it seems to be the way things still work in some parts of the world.

The main feature of the ritual of the League of the Iroquois was a Condolence Council where people, in effect, would condole each other for the loss of anyone that might have died since the last time they conducted the ceremony. Another feature of Iroquois society was that when somebody died the assumption was that this was the result of some pernicious act by somebody else.

People simply did not die of what we might regard as natural causes. Death was usually attributed to the malicious actions of others. This combination of attitudes set up a constant cycle of revenge-motivated feuding. The whole purpose of the Iroquois League was to short-circuit that cycle of feuding, at least amongst the Five Nations that were involved in the League. People who were outside the League, however, were beyond the pale of that organization and the assumption was that they were all targets for warfare at anytime.

Deer hides were a scarce resource. Perhaps the need to dominate areas in order to have enough deer for your purposes was one of the motivations for the constant aggression that went on in 1492 and even after. Later beaver pelts replaced deer as another resource that was in short supply.

One of the ways warfare expressed itself was in sporadic feuding and raids. The immediate motivation in many of these cases was the capture of people, especially women, and their incorporation into communities, sometimes as slaves, sometimes as adopted replacements for people who had died recently. Warfare also occasionally took the form of pitch battles. A description and drawing from Champlain tells us that men often dressed in slat armor in these cases. The pattern in this case would be for large groups to come together and shoot arrows at each other, dodging arrows until somebody was wounded. Perhaps after a few people were hurt or killed they would all go home to brag about what they had done and to commiserate about their losses.

So there were multiple and complex motives for warfare: the capture of prisoners, revenge, control of trade, and later the acquisition of furs as wealth. Torture and even cannibalism were also involved in violence in the Northeast at this time. One can wonder why this went on and what the motivations for it were, for it was extreme in many cases. There are about six prerequisites for this kind of behavior, not just for northeastern North America in 1492 but for elsewhere in the world at other times and other places. The first prerequisite was well developed feuding or warfare, which existed in the Northeast in 1492. Second, the taking of prisoners was an important objective. Third, there was a strong cultural emphasis on conformity and generosity within the local group. Fourth, there was a strong notion of supernatural cause in the Iroquois world view. Fifth, sacrificial propitiation of supernatural agents was one of the things the Iroquois did to try to make things better. Finally, sixth, there was intense competition for scarce resources. When these six factors are in place, as they were in the Northeast in 1492, the six crucial pieces in place that will lead to the torture complex and occasional cannibalism. One sees this not just amongst the Iroquois but amongst other groups at different times and other places. And this was the situation the Jesuit missionaries found themselves moving into in the 17th century.

Other affects of warfare included a nucleation of people into much larger communities than they had lived in previously. The Draper site, just outside of Toronto, is a prime example,

with its large number of longhouses and a population approaching 2,000. Looking again at Otstungo and other Iroquois sites of the period, we see that in many cases they placed these densely occupied, fortified villages up on the tops of cliffs or other places where they had strong military defense. Looked at from below, Otstungo sat atop an 80-foot cliff that one would have had to scale if one had wanted to attack this village. We also find strong palisades being built around these villages at this time. In many cases three rows of posts or poles were put in and tied together at the top. This way defenders had a V-shaped trough of poles at the top, and men could actually stand or run along the top wall and attack from above those trying to break through it. At Otstungo we found the remains of a fortification ditch that protected a peninsula of lands surrounded on almost all sides by steep cliffs. The ditch and the palisade it supported protected the site's only level access to the surrounding land.

A drawing by is by Andre Thevet from about 1584 shows us how Europeans understood these defenses. We see in this example some of the European misunderstandings of what Iroquois fortifications were all about. In this particular case there was some story that the Indians knew how to burn fires that issued poisonous smoke, and that they knew how to steer the smoke towards the enemy. Thevet's story was that the opponents would be overcome since they did not have gas masks which, of course, nobody at that time had. But apparently the threat of poisonous smoke in 1584 was about as real as the threat of poison gas was

a year ago in Iraq.

We also have other European misunderstandings of what Iroquois fortifications looked like. Very often explorers would go back and they would describe these things for engravers. The engravers would try to illustrate what the structures looked like on the basis of a few such descriptions and their own knowledge of European analogues. The results of such attempts often looked more European than Indian.

Historical Demography

I will end with a few comments about population levels in the Northeast. With all due respect, I would suggest that the estimate of six million North American Indians for 1492 presented in the book America in 1492 is too high. According to the estimate of Douglas Ubelaker America north of Mexico probably had a population of about two million in 1492. That is probably too low. The truth is probably somewhere in between those two numbers. If we zero in on just the region where I have a little more expertise, we see that Ubelaker thinks that there were about 360,000 Indians in the Northeast in 1492. This is almost as many as I would calculate were there, but not quite. The revised estimate that I have for greater New England, which includes eastern New York and western New Brunswick, is 186,000 people. There were probably about 95,000 Iroquois in 1492 and about 178,000 Algonquians stretched in that long band from Nova Scotia down to Carolina. That gives one some idea of how many Indians were there at about the time Columbus was wandering around in the

Caribbean. What later happened to these people, of course, was that they were struck by exogenous epidemics. Smallpox was the worst, but they also suffered from measles, influenza, as well as other diseases, and these hit the Northeastern region repeatedly after the early 1630s. That was when the population decline began, and it dropped like a stone, with people losing something on the order of three quarters of their total population in a matter of decades in many instances. Populations reached their nadirs in the Northeast around 1900. It was a process that began in the 1600s and lasted almost three centuries. The American Indian populations in the Northeast only began to increase once again after the beginning of the century we are in now. They have almost, but not quite, increased back to the level they were at in 1492. There are not quite 95,000 Iroquois around at the moment but they are getting there, and its nice to have them back.

The Andean World in 1492

by
Alan Kolata

In some respects, the title of my lecture is a misnomer. There was really no single Andean world in 1492, but rather a whole constellation of Andean worlds. When the Inca began their audacious drive to empire in the late 14th and early 15th centuries, they were faced with a breath-taking variety of social landscapes. At its apogee, the Inca empire incorporated over 200 separate ethnic groups, many speaking mutually unintelligible languages. The Inca's imperial bureaucracy strained to conquer, and then to administer, societies that ranged the spectrum of human organization from small, dispersed bands of hunters and gatherers that inhabited isolated enclaves in the densely forested, tropical zones of eastern Ecuador and Perú to powerful, immensely wealthy native states of the Pacific coasts and Andean highlands. Great native kingdoms like that of the Chimu and Lupaca peoples bitterly contested Inca imperial ambitions. Local rebellions and resistance were to plague every Inca emperor until Atahualpa's epochal encounter with Francisco Pizarro on the night of November 16, 1532, when the fate of native Andean peoples passed irrevocably into the hands of the invading forces from Spain.

Like the Spanish after them, the Incas were single-minded interlopers in a world of bewildering ethnic diversity. But, unlike the Spanish, the Incas were not operating in a landscape

that was completely alien to them. Although multi-cultural and pluri-linguistic, the social world in which the Inca lived shared certain signal landmarks: shared points of cultural reference to which the Inca oriented themselves. Despite the overlay of cultural diversity, there were certain commonalities: a number of salient structural features underlying native Andean civilization that permitted the Inca to move in diverse cultural milieux with a sense of easy familiarity.

These basic structural features of native Andean society were the secret to the Inca's remarkably successful "blitzkrieg" through the Andes. The perennial question of how, in the evanescent space of a few generations, the Inca managed to transform themselves from an ordinary group of feuding, tribal warlords into the masters of the greatest single Indian nation in the Western Hemisphere does, in fact, have an answer. And the answer is situated precisely in grasping this infrastructure of social, political, and ritual life in the Andes. Remarkably enough, these basic principles undergirding traditional social life in the Andes still have resonance. Even today, in the rural reaches of the Andes, life goes on within idioms of social relations and religious beliefs that would not have been alien to the Inca mind some 500 years ago.

But, of course, the immensely strong forces of acculturation and absorption into the modern nation states of Latin America are slowly eroding the social landscape of the native Andean world. As young Quechua and Aymara families from isolated villages pour into the increasingly chaotic cities of Bolivia and Peru attempting

to escape the bitter realities of rural poverty, they are changing their lives, and the special identity of their cultural heritage forever. Our living mirror of the past diminishes and grows more opaque each year. But this image and linkage to a rich past still exists, and we can learn much about pre-Colonial Andean reality by acutely observing and participating in the new social worlds being created daily in mountain valleys and high plateaus.

What, then, are these basic structural principles of native Andean society to which I am referring? Although there are other ones, here I will highlight three such principles that were of supreme importance. One, the ayllu form of organization, we might classify as social in character. (We can loosely translate ayllu for the moment as a traditional Andean lineage, that is, a cluster of people related by blood.) The second structural principle, the institution of kurakas, we might gloss as fundamentally political: kurakas were the Andean equivalents of leaders, headmen, or chiefs. And the third, ancestor worship, is ritual or religious in nature. Although I will describe them separately, to truly understand their significance, one must be aware that these three institutions, in practice, thoroughly interpenetrate, one with the other.

These three--ayllus, kurakas and ancestor worship--are part of the same, intermingled essence of native Andean reality. They are the same essence that the Inca shrewdly manipulated to project their control over an empire that was to encompass over 7 million people from one end of the Andes to the other.

Let's begin then, with the ayllu, and more essential still, the household, the basic social building block of the ayllu. The first principle of social organization within native Andean society, not surprisingly, turned on relations of kinship. Social relations were structured around rules of behavior and action that were prescribed from birth. Upon birth, a person assumed a set of relationships that provided the framework for interacting with the exterior world. The rights and claims that people maintain with one another in these indigenous communities through kinship bonds determines, in great part, if not exclusively, who a person may rely upon for mutual aid, and assistance with labor intensive activities, such as building a house, cleaning a canal, preparing, planting or harvesting a field.

The basic productive unit in Andean society was the household. The social expression of the Andean household was a limited number of people, generally related by blood, organized according to divisions of labor based on age and sex. We know, for instance, that the rural Inca household consisted of parents, children at different stages of growth and, at times, elderly adults: grandparents or elder uncles and aunts who had passed beyond their productive years and obtained a social status of some honor.

We learn from the 16th century Spanish sources that the household was organized according to a system of age grades for both men and women, conceptualized from the moment of infancy to death according to the kinds of tasks a person performed on behalf of the household. In early childhood, boys would engage in herding

or perhaps hunting small game, at times in the company of their fathers; girls participated, from as early as 4 years old, in weaving, herding, gathering herbs and grasses and the like. Later, as boys approached the end of adolescence, they began to participate in raiding parties, and would act as chasquis, or runners and messengers. They would also be absent for long stretches guarding the llama and alpaca herds in their high winter pasturage. Girls moved on to the responsibilities of gathering firewood for the household, weaving textiles for the family and other similar domestic chores.

By about 18-20 years old, boys and girls were considered eligible for marriage, and for passage into the status of full adult, with the right and obligation to form their own household. They became full-fledged members of their society finally with the birth of their first child. The household could perform many of the tasks required to produce its basic economic requirements: these revolved principally around cultivating fixed agricultural fields, and herding llama and alpaca in more distant pastures at high elevation. In Andean societies there was so little difference between access to kin and access to wealth that material and spiritual well-being was reckoned in terms of kin available for labor. Personal, or more aptly phrased, familial wealth was not conceptualized as tangible property, but rather as the power to mobilize labor through a kinship network.

Despite the resiliency and productivity of the household, the economic well-being of native Andean society depended upon the

integration of the household into increasingly more extensive social groupings as means of gaining access to larger network of kin, willing to share labor and the risks of life in the difficult Andean environment. The larger social universe beyond the household that was the arena of action for most people was the ayllu.

Writing in the 1560's, the Dominican friar, Domingo de Santo Tomas, described the ayllu in the following terms:

"Among them, if a gentleman is particularly known in some way, his children take on his name; and not only the children, but all his descendants and in that way are formed among them the lineages that they call ayllu. And so it goes in all of the rest of the provinces of Peru, particular lineages, which they call ayllus, take the name of their ancestors."

According to another marvelous 16th century source, Waman Poma de Ayala, the ayllu was bound together by an ethic of mutual aid that he called "the law of marriage and good order." Of course here, Waman Poma frames this passage in Christian, almost Biblical terms, but nonetheless, despite his Europeanized rhetoric, he is penetrating to an underlying indigenous reality:

"These compadres helped one another in their work and in other necessities and when they were ill and in eating and drinking and in the celebrations and in the sowing and in the mourning at death and at all times as long as they lived, and afterward their sons and descendants, grandchildren and great-

grandchildren aided one another and kept the ancient law of God."

We know then that ayllus are defined as any social group whose members are related to one another through descent from a common ancestor. According to our 16th century sources, ayllu also carried meaning as a territorial unit. The term ayllu can also refer to a cluster of lineages, living with an ethic of mutual aid, protection, co-operation and sharing. These clusters of lineages, normally inhabited a circumscribed physical space: typically, a village that held lands in common.

To the kin relationship, then, we must add land holding and resource exploitation definitions to our understanding of the ayllu. the clusters of lineages were frequently grouped together by historical relationships and divided into two halves. The division of the social world into two parts is an organizational principle referred to by anthropologist as moieties. The various ayllus within each moiety, as well as the two divisions of the moiety itself were hierarchically ranked. This is a form of social organization that appears in many parts of the Americas, including among others, a number of indigenous groups living in the Amazon basin, particularly among the Ge-speaking groups of the tropical lowlands.

The classic 16th century description of the Inca moiety principle is that of Juan de Matienzo:

"In each district or province there were two sectors (parcialidades): one which is called hanansaya, and the other

hurinsaya. Each sector has a chief (kuraka principal) who commands the subchiefs and Indians of his sector, and does not interfere in commanding the other, except that the native lord of the hanansaya sector is the leading personage of the whole province, and he is the one whom the other lord of hurinsaya obeys as he is told. The chief of hanansaya gets the best place when seated and in everything else which reflects this order. The members of the hanansaya sector sit on the right side and those of hurinsaya on the left, each according to his rank. Those of hurinsaya go on the left behind their chief, and those of hanansaya on the right behind their chief."

What is important for our purposes is the structural flexibility of the moiety. The moiety was a form of grouping people that could be applied to virtually all demographic levels of society. One moiety division was more inclusive than the previous one, just like a series of Chinese boxes, one within the other, identical in all but scale. The principles of administering these moieties remained constant (with two chiefs, or political leaders always representing each moiety division). Villages, towns, cities, valleys and whole provinces could be grouped and administered in this way.

But, what happened if this ideal system did not function smoothly. That is how did the ayllu groupings and the other more inclusive social groupings (moieties) respond to internal conflict and social tension? The ayllu system was not always perfect; not everyone played by the rules and argument over access to land, to

labor and other essential resources represents even today a common source of enmity among siblings and other kin.

Here is where the importance of our second structural principle, that of the institution of the kuraka, or headmen, or chief, comes into play. There are some compelling accounts of kurakas in Spanish. One of the most interesting, and perhaps inadvertently perceptive accounts is that of Juan de Matienzo: He described the kurakas as "an idle, elite class . . . given much to drinking, wenching, and generally laying about, providing no useful service to the state . . ."

But at the same time, in document after document, we see the indigenous peoples themselves, presumptively the class exploited by these layabouts, asking the Spanish courts to confirm the kurakas in their position, because, they argue, without them everything would fall into chaos . . . "no one would know when and where to plant." This is our first clue that, despite Matienzo's portrait of them as drunken parasites, these kurakas actually perform a service for the masses. Matienzo himself gives us deeper insight into the services they performed. Later in the same manuscript he comments:

"[the kurakas] function is to be idle and drink, and to count and divide up, they are very capable at this . . . more so than any Spaniard . . . and they keep accounts with multicoloured stones (quipus), so ably that it is a pleasure to watch them."

What the kurakas are dividing up and counting is essentially land, and, more importantly, the social map of who had access to land for agricultural production. The kuraka were responsible for keeping maps of the lands held in common by the ayllu and making decisions as to which lands individual households could cultivate in a given agricultural year. They were responsible for adjusting the amount of land available in terms of the changing circumstances of the households.

And so, in a 16th century document from Lake Titicaca, the visita of Garci Diez de San Miguel to the Lupaqa Kingdom, and Aymara group that was incorporated into the Inca realm around AD 1450, an informant comments explicitly that "the kurakas are in charge of inspecting all the lands that are divided up among the Indians each year . . . to guard against some entering into the land of others".

We see that the kurakas principal obligation is to keep the map of corporate lands, to decide how to allocate lands among the members of the ayllu for each agricultural season, and to readjust these decisions on a yearly basis. (Actually not the solar, calendar year with which we are familiar, but one attuned to the Andean agricultural cycle of the seasons in which the fields are prepared in June-August, planted from September-November, and harvested in April-May.)

The ayllus and moieties, in essence, ceded some of their natural autonomy to a more inclusive community authority, the kuraka, in order to maintain an efficient organization of

agricultural production within the community. In another document from 1562, a kuraka describes his function in the following terms:

"the sons succeed their parents in the lands and they divide the goods and the chakras (agricultural fields, here referring to household fields) among themselves, and sometimes the brothers quarrel with one another over the division of goods and chakras and the kuraka puts them at peace"

So here we see clearly the important judicial function of the kuraka.

The kuraka was also obligated to organize the ceremonial cycle of the group of which he was the leader. And this entailed considerable cost because ritual acts of public generosity were a part of the job description: [according to Waman Poma], a "good kuraka was generous and hospitable" and sponsored all of the main festivals. Agricultural production in the Andes was organized as a cycle of religious festivals. One could say of these native societies that what was produced in the agricultural cycle of the seasons was social solidarity as much as corn or potatoes; and it was the critical role of the kurakas to regulate this conjoined agricultural and ceremonial cycle.

How did one become a kuraka in Inca society? If there were obligations, what rights and claims could a kuraka make upon the ayllu?

Although this has been open to some dispute and still remains a point of contention, most agree that the kurakas formed part of an hereditary elite . . . the European sources frequently refer to

them as "native, or natural lords," and make direct analogies with the petty nobility of European states. The kurakas themselves frequently said that they "succeeded their fathers as long as they were capable and able to do it." During the time of the Inca empire, kurakas at all social levels formed a separate, hereditary elite, linked through kinship to the ayllu and moiety groups in which they lived, but claiming special rights, including claims to labor from their kin group.

The kuraka, in other words, in addition to his duties and obligations had a privileged position within his local group. A native kuraka described this privileged position in the following way: "They (the members of the communities) serve the chiefs in turn by preparing their fields and their houses and providing them with straw and with firewood . . . and they give each chief an Indian to guard his herd and he gives them food when they work and some wages and meat when he has it and some coca." . . . "they do not work inherited properties nor hire themselves to labor for others, but maintain themselves from the tribute given them by the Indians of their ayllu."

The kurakas were the only members of the ayllu who did not join directly in the physical labor of the community except in a token symbolic sense at the beginning of the planting season. Although the kurakas maintained certain privileges of access to labor from their ayllu and moieties, these privileges were not granted by the community members as a matter of course, or by the threat of coercion by the kuraka: these were not compelled

privileges of a parasitic, coercive nobility: They were given freely by the community members through a specific social etiquette that reinforced the concept that the privileges to be extended to the kurakas were the gift of the community:

1. the kurakas were required to formally "request" the service they required: planting, firewood, from the community members, and

2. the kurakas had a reciprocal obligation to give the workers food, coca and other tokens of "payment" in return for the labor service requested. So this was an exchange of value, not a coerced, corvée style labor obligation.

It is important to note that the Inca emperor, although he was the maximum kuraka of the Andean world, was himself obligated to request labor service from his subjects. And he had an obligation to stage huge banquets, and redistribute gifts from the state warehouses periodically to maintain his prestige within his empire. Again we see here that fundamental structural patterns at the local level are reworked by the Inca imperial system to extend and maintain control. Rather than replace local kurakas with state government officials, the Inca frequently chose to rule indirectly through the natural system of kurakas already in place. This went a long way toward reducing local hostility to the Inca overlords. There were few abusive officials imposed by the state government on local communities.

The Inca rarely resorted to direct subjugation of local populations in the provinces they moved against. Rather they

worked within the pre-existing framework of ayllus and kurakas. The quick expansion of the empire was facilitated by the Inca elites manipulation of ayllu and kuraka structures throughout the area of their realm. In a sense, we might consider that the Andean area was preadapted to rapid territorial expansion. The Inca shrewdly exploited these pre-existing forms of organization to promote and intensify their own political power. Rather than replace scores of local kurakas with foreign officials employed by the state, the Inca "bought" the loyalty of local lords and headmen through grants of land, and marriage alliances with Inca noble women.

In a real sense, the "grand strategy" of the Inca empire was not a military one at all. Rather it was an audacious attempt to propagate Inca authority by creating one enormous ayllu, headed by one paramount kuraka: the reigning Inca emperor. By offering Inca noble women as marriage partners to local elites (with all the prestige and status that would bring), the emperor was literally creating kinsmen from foreigners; kinsmen who were then bound by ayllu principles, by the "law of marriage and good order" to offer their loyalty and services to the king. The Inca conceived of their empire as an extension of themselves, a projection of their elite ayllu into the world.

Ayllus and kurakas, then, were quintessential Andean institutions, familiar to very native Andean, and fertile ground for manipulation at the hands of powerful interest groups, like the hard core of elite who guided the Inca imperial enterprise.

But what of our third structural principle of Andean life--ancestor worship? How does ancestor worship, a seemingly intimate and personal religious practice, fit into this picture of Inca "spin-doctors" manipulating basic Andean values and institutions for their own benefit?

Well, first it is essential to understand that ancestor worship itself was embedded in the fabric of the Andean ayllu. Recall that the core definition of the ayllu was a group of related individuals who trace their origin back to a single, common ancestor. The dead founder of the ayllu became an object of worship. The ayllu shrine was an altar and perhaps a ritual bundle of objects dedicated to perpetuating the memory of this eminent, deceased ancestor. Often the dead were buried under the floors of houses so that living members of the community could remain in contact with them. Some wealthy ayllu members had great burial towers built to hold the preserved remains of their ancestors. These sepulchres were not permanently sealed so that the living could periodically make offerings to the dead, or perhaps place another family member into the communal tomb. In a real sense, Andean religion was one long dialogue with the dead.

The dead were thought to intercede with the divine forces of nature on behalf of the community. And, a particularly effective advocate in the spiritual world was a person, who in life, had founded a lineage, and was at one time a powerful kuraka. The ancestors' intercession with the great deities and forces of nature that imbued the native Andean world with a special sense of

spirituality was specially focused on agricultural fertility. Ayllu worship at the ancestral shrine was focused on agricultural ritual: to call the rains, to ward off frosts and pestilence, to plead for bountiful harvests.

Among the Inca élite of Cusco, ancestor worship, this essential element of ayllu religion, took a peculiar and spectacular form: it was transformed into an elaborate cult of the royal mummies. This cult simultaneously fascinated and repelled the Spanish chroniclers who vividly recorded this key element of Inca spirituality. Bernabé Cobo gives a particularly graphic description of the cult of the royal mummies and its significance.

[The Inca] "had the law and custom that when one of their rulers died, they embalmed him and wrapped him in many fine garments. They allotted these lords all the service that they had in life, so that their mummy-bundles might be served in death as if they were still alive. . ." The members of the royal ayllus "brought [the mummies], lavishly escorted, to all their most important ceremonies. They sat them all down in the plaza in a row, in order of seniority, and the servants who looked after them ate and drank there . . . In front of the mummies they also placed large vessels like pitchers, called vilques, made of gold and silver. They filled these vessels with maize beer and toasted the dead with it, after first showing it to them. The dead toasted one another, and they drank to the living . . . this was done by their ministers in their names. When the vilques were full, they poured them over a circular stone set up as an idol in the middle of the

plaza. There was a small channel around the stone, and the beer ran off through drains and hidden pipes."

This lurid spectacle of the descendants of dead kings ministering to their ancestors' elaborately costumed, desiccated corpses with offerings of good, drinks and toasts in the plazas of Cusco obscures the subtle political and religious nuances embedded in the cult of the royal mummies. Although grounded in the pan-Andean religious practice of ancestor worship, this élite cult was transformed into something more than the simple veneration of a dead lineage ancestor.

The elaborate feasting of the dead royals was organized around and intended as ceremonies of agricultural fertility: again Cobo noted . . . "when there was need for water for the cultivated fields, they usually brought out [the dead king's] body, richly dressed, with his face covered, carrying it in a procession through the fields and punas, and they were convinced that this was largely responsible for bringing rain." Dead kings were frequently addressed in the protocols of ayllu toasts as Illapa, a weather deity who personified the atmospheric forces of wind, rain, hail, lightning and thunder: all of those meteorological phenomena responsible for the growth or destruction of agricultural crops.

The public display of the royal mummies in the principal plazas of Cusco during state occasions, arranged in "order of seniority," was a graphic affirmation of the legitimacy of Inca dynastic rule. On these occasions, the reigning king would participate in ceremonial processions throughout Cusco quite

literally in conjunction with the complete line of his royal ancestors, who were physically represented by their richly adorned, relictual bundles. Who could contest the legitimacy of the Inca when the entire dynasty, the distilled history of their ruling mandate, was constantly visible and present to the nation? By these ritual actions, the deceased monarchs and the living emperor symbolically became one: embodiments of legitimate power, emblems of agricultural fertility and abundance, and powerful icons of national identity.

The cult of the royal mummies was a particularly intense expression of Andean ancestor worship, but with a new twist. The mummy cult had an important political dimension; it was an effective propaganda device. The Inca rulers propagated the cult of the royal mummies throughout the entire empire. Again, the Inca empire was being portrayed to its subjects as one gigantic ayllu which shared these special ancestors. Their mummies were venerated throughout the empire because of their unique ability to communicate directly with the deities, to intercede on behalf of the masses for good harvests, for abundance, for health.

Only in the past few years have we begun to fully appreciate the subtlety of Inca statecraft, and the manner in which they formed the largest empire in the western hemisphere through perceptive manipulation of institutions and social relations that were basic to the ancient Andean world. The ayllu, the kuraka and ancestor worship were forms of social, political and religious behavior worked out by native Andeans over centuries. They were

key features of societies throughout the Andean world in 1492. But the peculiar genius of the Incas was to take this fundamental institutional substrate, transform and magnify it through shrewd application of political techniques such as indirect rule and propagation of state cults, and employ it on a massive scale as a technique of empire-building. If the Inca built upon the experiences, innovations and adaptive skills of their cultural predecessors, their achievements in the arena of politics and statecraft stand unparalleled in the New World.

Technology in America in 1492

by
Clara Sue Kidwell

In the late fall of 1492, two men watched the skies with particular interest. On the bridge of the Santa Maria, Christopher Columbus looked to the heavens and relied on sextants and astrolabes to plot his position on the vast Pacific in relation to the sun and the stars. In the new world, a Hopi man left his home before dawn on a clear, cold morning and walked to a rise of land near his village, where he settled himself at the top of the rise to watch the sun make its first appearance above the eastern horizon.

The Hopi Sun Watcher and Christopher Columbus had something in common--a desire to know what the future would bring. For Columbus, his calculations and his beliefs told him that India lay ahead. For the Hopi, the progress of the sun along the solstice point indicated the timing of ceremonies that would assure that the sun would turn back in his path and reverse his journey across the sky so that the seasons would change and the corn crops would grow. His observations timed the performance of the Soyal ceremony, which helped the Sun regain his strength and begin his journey back to his northern house. It also marked the yearly appearance of the Katchina spirits, who bring rain and fertile crops and are an essential part of Hopi life. His observations also predicts the times of the last killing frost so that planting may begin. The

Sun Watcher knows where the sun will rise, but he can also tell where the moon stands in relation to the sun during the year, and whether it will be early or late in following the sun in a month.

The ability to predict the outcome of events is an essential aspect of science in the modern world. It was, and is, crucial to the continuation of the Hopi world. The comparison between Columbus and the Hopi reveals basic similarities and differences between the world views of the Old World and the New. Columbus was a product of a European intellectual tradition of rational inquiry. He did not doubt that the world was round; he simply misjudged his distances and didn't know about the land mass that stood in the way of his passage to India. He probably continued to believe that he had discovered India, even if he did not find the great cities and wealth that he expected. The Hopi man believed that his world was bounded by four sacred directions, and that his actions were necessary for it to continue.

Although the ways of understanding the natural environment might have differed, both Europeans and native people had similar ends in view--to be able to control the outcome of events in the world around them. Both relied on systematic observation of physical phenomena to be able to predict future events.

But European and native world views diverged on the importance of uniformity in nature. A. Irving Hallowell, an anthropologist working in northern Canada in the 1930's, asked a Saulteaux man "Are all the stones we see around us alive?" and after the man had thought about the question a while he replied, "No, but some are."

To the contemporary scientist, it is the "a'" that is important, a law of nature. To the Saulteaux, it is the "some", those rocks that people see moving of their own volition, speaking to people, or otherwise acting in an unusual way.¹

Native people nevertheless recognized similarities, and they had ways of classifying things in the physical world, although their categories diverge significantly from the Western Linnean plant classification system. The Navajo characterized plants as male and female, depending on characteristics such as size and hardness or softness of stems and foliage. The system was based on analogy to personality traits distinguishing men and women rather than on the idea of physical sexual characteristics of plants.²

The Aztecs used three major categories of plants: trees (quauhtli), bushes (quaquauhzin), and herbs (xihuitl). Plants names generally include a word or suffix that indicated whether they were food (guilitl), ornamental (yochitl), medicinal (patli), or economic, plants used for building, clothing, or material objects, for which a number of suffices were used.³

The Thompson Indians of British Columbia named some plants according to medicinal use, as ilei'litu'nEl, "Cough Medicine," or cuxcuxuza, "grizzly bear berry," one eaten by grizzly bears. They also recognized that certain plants generally grew together, and their names indicated that they were companions. For example, the woodbetony (Pedicularis bracteso) was used in basketmaking. It was sometimes found with species of willow weed (Epilobium), and the

Thompson expressed this in its name skikens a. sha'ket, meaning "companion of willow weed."⁴

The Navajo puts bats in the same category as insects because of an origin tradition in which insects and bats lived together in a previous world. The badger was classified with the wolf, mountain lion, bobcat and lynx (which were grouped as predatory animals) because he was their friend.⁵

The native and European world views diverged in the matter of experimentation. For Western science, nature is governed by laws, and similar actions will always lead to similar results. The proof of a scientific hypothesis is in its power to predict the outcome of a set of circumstances controlled by the experimenter. For Native people, human relationships with spiritual forces governed the world. The Hopi Soyal ceremony made the sun turn in his path. It would be unthinkable to fail to perform it to see whether it worked.

Both world views valued systematic observation of nature, and particularly of the heavens. In Europe in 1492, the Earth was still the center of the universe (the Copernican sun-centered universe was not promulgated until 1543). Observations were oriented toward the movements of planets against the background of the fixed stars with their distinctive patterns that constituted the zodiac.

In the new world, the horizon was the most important marker.⁶ Throughout North and South America, people built structures that aligned with certain points on the horizon to allow for observation

of regularly recurring phenomena. In the ruins of pueblos dating back to at least 1100 a.d. in the southwest, Casa Rinconanda, a large circular kiva (a semi-underground chamber for ceremonial activities) in the Chaco Canyon region in eastern New Mexico, has 28 indentations around its perimeter and four specially placed niches. At the time of the summer solstice, the rising sun cast its first light directly upon one of the niches.⁷

Some of the curiously placed corner windows of the ruins of Pueblo Bonita in Chaco Canyon may be observation sites for solstices or other celestial phenomena.⁸ On Fajada Butte, near the large pueblo ruins in the Canyon, three large rock slabs rest on a small outcropping and lean against the side of the butte. On the day of the summer solstice, a thin dagger of light passes through the exact center of a spiral design carved into the butte's side behind the rocks. At the winter solstice, two daggers just graze the sides of the spiral. Whether the placement of the stone slabs is deliberate or accidental, the spiral in the rock is definitely of human origin, and the conjunction of light and shadow with the spiral make the sun dagger a solstice marker.⁹

On a bluff on the side of the Big Horn mountains in Wyoming is a Medicine Wheel which both predicted and marked the summer solstice. It consists of a circle of stones some four meters in diameter, with twenty-eight spokes radiating from a central cairn and five stone cairns placed around the outside of the circle. The solstice sun rises at a point along a sight line from one of the outer cairns across the middle cairn. Other sight lines along the

spokes of the wheel point approximately to points of rising of the bright stars Rigel and Aldabaran, which precede the solstice by a matter of weeks.¹⁰

The Pleiades were another predictor for future events. They appear in the sky in the fall and remain there in the northern hemisphere until the spring, when they disappear below the horizon. The dates of their first and last appearance depend upon the latitude of the observer; however, their first presence generally corresponds with time of the first killing frost, and they remain in the sky until about the time of the last frost. They are a distinctive marker of planting time for agriculturalists. At approximately 42° north latitude, the Seneca communities in up-state New York observed first rising of the Pleiades by the middle of October. They timed the beginning of their traditional Mid-winter ceremony by the passage of the Pleiades directly above the central longhouse of their villages in early February, and it predicted the beginning of their planting season. The Pleiades disappeared from the night sky in about mid-May. The type of corn grown by the Seneca required approximately 120 days of frost-free weather to appear and mature. The zenith passage of the Pleiades in mid-February marks the mid-point of the frost season. The disappearance of the Pleiades from the sky around May 5 to 19 and their reappearance around October 10 to 15 encompass a period of 153 to 163 days, a comfortable margin for the growth of corn.¹¹

The Pleiades were observed by agricultural people throughout North America, and various stories were told about their origins.

A charming story from the Sac and Fox tribe tells about six brothers and the youngest brother's little dog, who were hunting one day. They began to chase a particularly large and strong buffalo. As they pursued the beast they suddenly realized that they had left the earth and were running up to the sky. But it was too late to stop, and so they must continue the chase forever. The six bright stars of the Pleiades are the six brothers, and the faint, seventh star is the youngest hunter's little dog.¹² The story explains an aspect of the physical world in a way much different than that of European science.

The Aztecs observed the Pleiades for a different but equally important reason. When the Pleiades passed directly overhead at midnight in the final year of the 52-year cycle called the Calendar round, the ceremony named toxihmolpilia, or "binding of the years," occurred. The ceremony bound the two cycles of the Aztec calendar system. One was a sacred calendar of 260 days (the tzoltin) formed by the interlocking of a series of 20 named days (as we name the days of the week), and a series of 13 numbers (as we count 29, 30 or 31 days in a month). This year is unique among calendar systems. It may derive from an origin at the city of Copan, which is at approximately 20° north latitude where the sun passes directly overhead two times year at an interval of 260 days.¹³ Its purpose on the lives of the Maya was, and remains, its astrological significance.¹⁴ It may be related to the 260 day gestation period of the human female, or to the base 20 numerical system of the Maya.¹⁵ The second cycle corresponded roughly to a

solar year, with 18 named months each consisting of 20 numbered days and five days at the end, which were of special religious significance. It was not corrected with a leap year and so gained time on the seasons and is generally called the Vague Year. Its purpose was not to keep time for planting seasons. Rather, the Mayan calendar followed progressions of days through cycles, and the Vague Year's purpose was more likely to mark certain ceremonial or political events.

Like two interlocking gears, the 260 day tzoltin and the 365 day year began at one point and revolved against each other until that same point as reached. It took 18,980 days (or 52 years) to complete this cycle, which was known as the calendar round. The round gave a unique identity to each day in the cycle, and it made it possible to record unique historical events.¹⁶

The coincidence of the two ceremonial cycles and the Pleiades occasioned the toxiuhmolpilia. It was a renewal ceremony, marked by sweeping and cleaning and disposing of rubbish, and putting out of old fires, a ceremonial procession to a temple in the city of Tenochtitlan, and the kindling of a new fire in the chest cavity of a human sacrificial victim, whose heart had been cut out. New fires were then lit throughout the empire, and the Aztecs were assured that their world would continue.¹⁷

Any calendar system is based on long term observation. At Chichen Itza (a site in the Yucatan dating to about 800 a.d.) a curiously shaped and partially ruined tower, the Caracol, resembles a modern astronomical observatory.¹⁸ Shafts in the wall of the

tower aligned with the vernal and autumnal equinoxes. The alignments also correspond to the further northernmost and southernmost helical rising of the planet Venus, (the term helical refers to the appearance of the star in the sky just before sunrise).¹⁹ The Maya called Venus noh ek (great star) and chac ek (red star), and they knew that Venus completed its orbit around the sun in 584 days, although the concept of physical bodies spinning in endless space was probably foreign to them. Venus was a deity, to be not only observed but prayed to and propitiated with sacrifices. they knew it as the morning star for 236 days, invisible then for a period of 90 days, as the evening star for 250 days, and invisible again for a period of eight days.²⁰

The importance of Venus reflected some reality other than purely physical observation. It served as a marker for ceremonial or political events.²¹ The Maya also observed the cycles of the moon and could predict its periodic eclipses.²² They recorded their observations in a sophisticated mathematical system in base-20. Their markers were dots for 1-4 and a bar for 5. Powers were indicated by the placement of sets of dots and bars, higher powers being indicated by groups of dots and bars written one above the other. They had a special symbol for zero. There is no evidence that the Maya used their system for multiplication or division, but it was capable of dealing with extremely large numbers.²³

The Inca used quipus to store information. A quipu is composed of a number of strings, with knots tied in patterns on a series of strings that hang from a main cord, and some of those

strings may in turn have dependent strings. The strings are often of different colors, which recur in sequences. On each is a series of knots, again tied in distinct groups. If one views the quipu as an elaborate coding device, perhaps analogous to a Chinese abacus, it is obvious that the variables of color sequences, number of knots, number of dependent strings and patterns of knots could serve to record a tremendous amount of information. If the quipu is a very sophisticated code, the problem is that no one has yet broken it. There is no rosetta stone to provide a translation to the meeting of quipus into a language recognizable to European based science."

The quipu may have its larger analogy in Incan culture in a system of geographical locations encoding observations of celestial phenomena. Around the city of Cuzco were 328 huacas, or shrines, which were aligned in 41 directions along ceques, or lines radiating out from the Temple of the Sun and reaching to the horizon. Although the numbers varied somewhat, there were about 8 shrines along each ceque. This system might function like a giant quipu laid over the city. One could imagine the ceques as strings radiating from a central knot, and the huacas as knots on each string. This imaginary quipu then divided time into units because the arc of distance on the horizon between any two lines was traversed in a set time, and the system might work as a calendar which organized the space around the city into political units because certain groups had responsibilities for ceremonies during each arc of time."

The system of ceques and huacas, with its values of 41 and 328, obviously does not correspond to the 365 1/4 day solar year of modern astronomy, but they do correspond to parts of the lunar year. The moon is as important a marker of time as the sun because of its waxing and waning. In the tropics, the sun moves relatively little across the horizon from season to season, and the moon's waxing and waning were more dramatic and more important markers of time. One has an arrangements of elements that add up to 365, the approximate solar year, and second has rectangles in groups of 28, which is close to the average number of days (29.5) in a lunar month.²⁶ From the evidence of ceques, huacas, and textiles, it appears that the Inca year was based on lunar months.²⁷

Like cloth, metal encoded meaning. The Incas were superb goldsmiths. They beat gold into thin foil and used to plate objects that thereby achieved particular cultural importance. But their most significant technique involved smelting an alloy of gold, silver and copper called tumbaga. The ingot was then beaten and annealed many times. Each annealing created cooper oxide which was removed with a salt solution. By progressively removing the copper, the process brought the gold to the surface of the increasingly thin sheet metal. The silver was then removed with a paste of iron sulfate and salt. The gold remained in a granular state at the surface of the metal sheet, and it was heated and burnished to produce the golden surface characteristic of Andean metal work. The technique destroyed most of the original alloy but imbued the object with special meaning. The golden object became

a metaphor for spiritual and political power. Camay, a term used in metal working, was the act of infusing life spirit into an inanimate object. Metallurgy was the power to transform the very essence of material and imbue it with religious significance, an inner form that was more important than the outer form.²⁸

Agriculture was the most important practical relationship with nature in the new world. It was based on the power to observe and predict events and to control their outcomes. Indians selected certain plants and controlled their environments through fire and water. They altered them and made them dependent upon human action for reproduction.²⁹ In the Andes, Indians domesticated a rather amazing 3,000 varieties of potatoes.³⁰ In the northeastern part of North America Indians domesticated sunflowers, sumpweed, goosefoot, Maygrass, and Giant Ragweed. These plants today are considered weeds because of their ability to withstand a wide range of environmental conditions.³¹ The Jerusalem Artichoke, the root of the sunflower, was another important food source.³² In the southwest, squashes, gourds and tepary beans were cultivated.³³ Corn became the major food source for many native groups throughout North and South America. It is descended from teosinte, a wild grass. The primary sources of food energy in plants is the seed. Wild plants reproduce by being able to scatter their seeds freely. Humans collecting seeds want them to stay in one place and gather plants whose seeds stay attached to the plant, but because humans must then remove the seeds from the plants, the plants become dependent on humans to disperse the seed so they can reproduce.

Teosinte's seed cases modified into rigid containers under human selection.³⁴ The Hopi further modified corn by selecting seeds adapted to the arid growing conditions of their mesas. They put down very long tap roots to reach down to the underlying subsurface moisture, and the seedling grew a long way to break the soil before putting out its first leaves.³⁵

The list of crops cultivated in the ne world in 1492 includes sweet potatoes, cocoa, pumpkins, squashes, peanuts, avocados, pineapple, chile peppers, and jicama.³⁶

Sophisticated irrigation systems made agriculture possible in some arid regions.³⁷ The Chaco River, actually a seasonally flowing stream, cut Chaco canyon, which became a major population center from about 920 to 1020. The inhabitants built large pueblos, of which Pueblo Bonito is probably the best known. Earthen walls were faced with stone. Pueblo Bonito had about 800 rooms and rose to five stories in some parts. Crops were planted on the narrow flood plane of the stream. Water also collected in natural basins along the rim of the canyon, and runoff from rainfall was channelled down the sides of the canyon. By about 900, however, the river cut its way deeply into the canyon bottom and became so entrenched that it wouldn't flood. The inhabitants of the canyon then built earthen dams to contain the stream, diversion walls and canals to bring the water to the fields, and sluice gates to control the flow.³⁸

The remains of nine major pueblo towns are located along a nine mile stretch of lower Chaco Wash. In the surrounding area there were four smaller pueblos ranging from 30 to 100 rooms and

at least 50 small villages of 10 to 20 rooms. The population was close to 10,000 people.³⁹ During the great building phase in Chaco Canyon, from about 1020 a.d. to about 1120 a.d., perhaps 100,000 pine trees were cut for building and fire wood. After 1120, however, virtually no new building took place, and by about 1220, the population of the canyon had drifted away, and the towns and villages were virtually abandoned. The most likely explanation is a great drought in the San Juan River basin that lasted from 1130 to 1190. Although the water control systems in Chaco Canyon were sophisticated, they could not deal with a severe and extended dry period. Technology had its limits.⁴⁰

American scientists now look to the uncharted reaches of space to determine the future of the universe. Hopi sun watchers still sight the progress of the sun along the horizon before the winter solstice, observing its points of rising by markers such as hill tops, valleys, and the point of rising over the roof of the Hopi Cultural Center on Second Mesa. Systematic observation characterizes both activities. Scientists theorize about the future. The Hopi know how it will turn out.

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Society in 1492

by
Jay Miller

Society is more, much more, than just one of the six themes in this exhibition. It is, rather, the mother of them all--because it is society that holds together and conditions the forms of technology, subsistence, trade, religion, and language. Society has a life of its own. It is more, much more, than the individuals who belong to a society at any given place and time.

Society is not just about people; it is about institutions with a momentum of their own beyond the life of any particular member. Among the institutions that characterize any society, their intermeshing occurs in predictable ways. Those in the west gallery of the Material World are the most responsive to influence and change from outside forces. Since 1492 they have been the most radically effected. Technology, subsistence, and trade deal with the outside and so they change with external conditions.

Themes in the east gallery like religion and language are more resistant to change because they are closer to the internal core of a culture, to the symbolic presuppositions that make each culture distinctive. Halfway between these two is the complex conglomeration called society, but the library staff would not let us put that part of the exhibit in the lobby where it belongs, between the galleries.

Society is an abstraction from various institutions, such as kinship, lifeways, and politics, but these too are difficult to present as other than abstractions. Instead, allow me to bring it all back home, as it were, and talk about the houses where all of these institutions came into play during everyday life.

Think for a moment about what this means. People live out their culture and their society in their houses and in other official buildings where public activities take place in the community.

Consider for a moment the best example that we have of this here in Chicago, a unique advantage lacked by most other Eastern cities. Go to the Field Museum and enter the Pawnee earthlodge. This was the winter home of maybe fifty Pawnees. Walk down the entry way that kept out the bitter cold of the plains and you enter the large round room where people and pets lived around a central fire in which women cooked the meals. Opposite the doorway is a shrine or altar, a place where the icons and sacred bundles of the family were kept.

Generally, two or more "families" shared the same house, often married brothers. The catch was, of course, that these were Indian families and as such they were very different from what most Americans are used to. These families stretched in all directions, up, down, and to the sides for as far as emotions and resources would allow. The relatives you were born to were only a "starter set" for cultivating as many relations as you could.

The Pawnee earthlodge symbolized many things. It was a house, a womb, and a microcosm of the universe. Around the edges were a series of bunks where the household sat and slept. The married brothers slept on either side of the altar in the back, other kin and wives (and successful men had more than one wife, often sisters) slept along the middle, and the oldest members, cuddling with their grandchildren, slept in bunks on either side of the door. The oldest were nearest the door because they were, literally and figuratively, on the way out.

Every lodge was part of a village, its medicine bundle linked into an overall network of spiritual power, with the village bundles meshed into confederacies of member tribes of the Pawnee. Villages were united by allegiance to the North Star and Wonderful Skull bundles. A village was defined in terms of its own bundles, leading families, corn fields, burial grounds, and intra-community marriages. While most villagers married within their community, leaders often married outside of it.

Because leaders were descended from stars who came to earth, they were different from other people. The Skiri band was led over a two year period by four chiefs, each of whom had a bundle that led for six months. In order, these were the Yellow Tent bundle of the Northwest, the Red Star bundle of the Southwest, the Big Black Star bundle of the Northeast, and the White Star bundle of the Northwest. The north bundles had charge during winter and the south ones during summer.

As with the Pawnee, so with all of the other societies of the Americas in 1492 and since. The hallmark of the Pawnee and of any other Native American society was its sheer and utter connectedness, with particular places, with other people, with other beings, and with the universe as a whole.

Such connectedness came at a cost, but it was a human one. People had to live with their environment; they were interrelated parts of one vast cosmos. Moreover, they were obligated to others more than to themselves. They had to take responsibility for others. Such a simple dictum had far reaching consequences which ranged from the obligation to feed the guest and shelter the homeless, included the leaving of offerings to plants and animals taken for medicines and foods, and extended to the torture and sacrifice of other humans, animals, and creatures as beautiful as butterflies to sustain the Sun in his daily rounds and the Earth in her vitality.

Similarly, many if not all tribes in the Americas equated their homes with the cosmos. Among the Barasana Tukanoans of the northwest Amazon,¹ the communal house that was the village was also likened to a womb, a body, and the world. Men came in the front door, near the public and ritual areas, while women came in the back one, near the family compartments along the curved rear wall. The heart of the body, the fire of the house, and the sun in the sky were all reflexes of the same centerings so important for organizing the flow of life. Elaborate rituals turned boys into men and consecrated foods for human use. Such first foods and

puberty ceremonies were, and still are, celebrated throughout the Americas.

Alone among the tribes north of the Rio Grande, the Pawnee almost yearly sacrificed a child to the Morning Star in return for the gift of life to the ancestral woman, daughter of Evening Star and Morning Star, who came to earth with the son of Sun and Moon to create human society. While other tribes like the Pueblos and O'otam (Papago) sacrificed children during moments of great need, most human sacrifice involved war captives dedicated to the Sun and tortured to release the pent up hostilities that had few outlets in native American societies.

Much further to the south in the valley of Mexico, the Aztec also sacrificed humans in their many temples to sustain the fifth creation of the world, which it was their special charge to protect from destruction.

The valley of Mexico was like a magnet for much of North America. It had the densest population and the largest trade network of North America. This population was organized, as you might imagine, on the basis of rank. At its core was the capitol of Tenochtitlan, the mainstay of the triple alliance of 1428 between the Aztecs and other Nahuas at Texcoco and Tlacopan, whose empire was fueled by tribute sent from over 400 vassal towns.

Houses varied with rank. The poor, as usual, were crowded into hovels of small size in unsafe areas. Commoners, who served by and large as soldiers, lived in multiroom compounds surrounded by a wall of adobe or planted cactus. Nobles lived in palaces,

with that of Moctezuma II having over 300 rooms for his family and staff.

Households of relatives were grouped in a calpulli, a corporate family owning land, guild or craft resources, and hereditary official positions. If your family were farmers, then you too would be a farmer unless you showed aptitude for another career. These calpulli provided long term stability for Aztec society, but there was room for special ability. A common soldier who captured four enemy warriors would advance to the minor nobility. A boy or girl who showed religious inclinations would be directed into the celibate priesthoods since there was not a lot of opportunity for hereditary succession. Other careers were open in the military, market management, and the legal system.

As Aztec armies conquered other peoples, such as the region of Chalco to the southeast (where Chimalpahin, the author of the manuscript at the end of the West Gallery, was born and raised to write the definitive history of his region), administrative provinces were formed and local capitols became the sites for garrisons and the abode of the local tax collector and accountants.

As allies moved into Tenochtitlan, the city had to be divided into four administrative wards, each with its own temple precincts, priests, and officials. Its market grew to huge proportions, each street, like an aisle in a modern supermarket, devoted to a particular craft, service, or foodstuff.

As the Codex Mendoza (the annotated drawings by native Aztecs intended to explain their way of life to Charles V but waylaid to

France and then England) explains an Aztec child was born into a pretty precise world. Naming connected him or her to a moment in time according to their birth date in the calendar, to the residence of their calpulli, and to the deeds of their ancestors and parents in service to the community.

Baby Two Rabbit or Eight Flower, unless having hidden talents, did whatever everyone else in their calpulli had always done, either in the fields, the market, the temple, or the palace. In all likelihood, they also married into another calpulli that did the same thing to strengthen the alliances between their families. Matchmakers might be used to better the pool of marriage prospects, but the pool remained a very shallow one.

Women were expected to identify with their homes and remain close to them, men, on the other hand, were compared to birds who flew off to battles, missions, and adventures. At the very least, men left daily to work in their fields while the women stayed in the house or yard to cook, clean, and provide child care. Only if involved in craftwork were couples likely to spend much of their time together.

In this reliance on couples, the Aztec speak to a much larger pattern of great interest in North America. The Aztec are a southern example of a huge stock of related languages stretching from middle Mexico north into the Great Basin (including modern Nevada, Utah, along with southern Oregon and Idaho). Within this common ancestry, however, there were very different social worlds that ranged from the palaces of Tenochtitlan to the windbreaks of

branches that constituted housing for Numic peoples of the Basin. The Numa had the kind of elemental society characteristic of the margins of the Americas.

Like the Inuit Eskimo of the north and the Yahgun and Ona of the tip of South America, Numic peoples were organized into families of married couples and children. But even here, these families were expansive and might include more than one wife, more than one husband, more than biological children, and elders or aunties with other than genetic claims to relationships.

Houses were simple, a cluster of branches or trees with an opening and a place for a smokey fire. People lived mostly in camps that were moved with the availability of seeds, nuts, animals, berries, bugs, and water. They had total freedom to move at will. During the heat of summer, they were high in the mountains. During the chill of winter, they sheltered in the valleys. When there was a large harvest of some food like pinyon nuts or fish or birds, people gathered from far and near to share, to dance, and to visit. As often as not, marriages were arranged or children named during these times of gathering. Most groups were named for the food of their area as though to advertise their specialty and invite others to dine. Such hospitality was far ranging.

Several hundred years before 1492, some of these Numic ancestors came south to the rivers and seep springs along the Little Colorado River of modern Arizona and began to build coursed masonry buildings in the style of Pueblos. Over the centuries,

they settled along the fingers that jut out from Black Mesa and became the modern Hopi. They too are related to the Aztec.

Living in compact villages with apartment-like room suites, their organization into clans inherited through the mother is lived out in these room rows. A mother and her married daughters live together, their husbands were tolerated as interlopers who were as likely as not to leave because of the brittleness of their marriages where clan ties remained strong. At divorce, a man went back to his mother or to his sister because that is where he belonged. He had the primary responsibility to train and educate his sister's children since they were directly related to him in a way they could never be with their own father who, after all, was raising his own sister's children. In addition, men also had the kivas or underground churches associated with their clan or priesthood where they retired to conduct rituals and take up their weaving, a distinctly male occupation among the Pueblos.

A matriline or a family of women occupied a suite of rooms that went from front to back on several levels. Lower stories were used for storage of food and property, while upper ones were used for living. In 1492, however, most of the time was spent out in the sun either in the plaza or on the roof of the apartment. Over generations many mothers and daughters would have been born and died, yet their common kinship would have been recognized in terms of linked households meshing into lineages, a clan with a common name and ancestor, and membership in a phratry or cluster of clans with similar rituals. Because the Hopi had a steady source of

water in an arid land, they received many visitors, some of whom chose to stay.

When foreigners came to live among the Hopi, each was given the same test. They had to make it rain. If they performed their ceremony and it rained, they could stay. Otherwise, they had to move on. Bringing rain was like bringing blessings to the community. It meant to be Hopi--to be good hearted. Not bringing rain meant danger for one and all. It reminded everyone of the dark side of society: selfishness, evil, and ill will. Among the Hopi, in-laws were usually prime suspects of witchcraft. They were necessary evils because they married women of the clan and provided children, but the tensions between clans were such that hostilities, which could never be expressed up front, gave rise to covert accusations of sorcery.

Hopi clans and houses were ranked. The women of important clans, such as Bear which provided the kikmungwi or town chief, kept sacred objects and passed these on to their eldest daughter, who inherited the house. In this way, over hundreds of years, important clans remained located near the central plaza where their leadership roles were ever at the ready. Women in the houses and men in the kivas remains, even how, a way of life among the Hopi and other Pueblos.

Indeed, men and women throughout the Americas thought of their lives and works as truly separate and equal (not but equal). Each had talents and abilities denied the other. Women provided

children and men protected them. Women sustained life, while men infused it with power, in both its religious and political senses.

My chapter "A Kinship of Spirit" for America in 1492 considered the logical varieties of social organization and kinship made possible by this recognition of male/female complementarily. Societies can emphasize links through men, links through women, distinct links through men or women, or combine links through men and women. Except for unusual individuals, men and women were distinct. Men sometimes had their own abodes. Scattered through American villages were men's houses where men could gather by themselves or with their sons to conduct men's business away from the haven of home and hearth.

What that chapter did not consider in sufficient detail was the logical possibilities of links through beings other than humans. In many cases these are the animals and other beings who were ancestors, patrons, or founders of clans or communities. Some were guardian spirits who graced enough individuals in a community that they formed a club or association. Interestingly, even among these people belonging to various spirits and species, genders still apply, although there is a considerable tendency for androgyny or combined male and female characteristics, along with what Dr. Raymond Fogelson has recently referred to as "gender benders": beings who are not clearly males, nor females, both, or neither. Depending on time, place, and circumstances, they are "free spirits" constrained by either biology or destiny.

Among Plains communities, as many as six genders were recognized. For females these ranged from wife to amazon warrior to virgin. For males these were super-warrior, contraries to husbands to berdache, men who take on a woman's role. In other words, gender is everywhere but not everywhere the same.

Among the Apinaye of northern Brazil, villages are divided into ceremonial halves of moieties which distinguish between those relatives who share a common substance (such as "blood" according the American kinship ideology, but just as easily it could be sweat, smells, tears, or appearances) and those who share a forged kinship through law or ceremony (like godparents, but ranging more widely to include shared names, ornaments, diet, and food taboos). Each moiety is viewed as different sides of the same thing; one can not exist without the other. Together they bisect the universe such that

<u>Kolti</u> moiety	<u>Kolre</u> moiety
right	left
red	black
men	women
fire	water
day	night
sun	moon
north, east	south, west
summer	winter
tame animals	fierce animals
dry season	wet season

The whole world was divided in this way. Among the Tewa Pueblos of New Mexico who have Winter/Summer moieties, their priesthoods and leaders mediate this division and are called "those in the middle."

At the highest grades of society, the leader acted as head of both the material and spiritual realms. As the logo for this exhibit (derived from a drawing by Guaman Poma) makes clear, the Inka was both the ruler of the realm of the four quarters and the occasional head of the priesthood, particularly during the annual harvest ceremony in April.

This was common practice. Among the nations of the North Pacific coast, such as the Tsimshian and Haida, the leader of a household, and with it a lineage and moiety, had two names, a summer one as a chief or smoygyet (literally a "real person") and a winter one as the head of a priesthood or smhaleyt (literally a "real power"). The same duality probably applied to the leading families of a Mississippian chiefdom such as those at Moundville, Etowah, and, here in Illinois, Cahokia.

Throughout the Americas, leadership is an extremely difficult, complex, and tricky subject. The vast majority of leaders in 1492 inherited their positions because they had long been in their families. Generations have acclimated to the spirits of a place and to the fluctuations in their environment, distilled this knowledge and passed it on within certain stable families who understood roles of leadership. This was no easy task. The Iroquois to this day say that a chief must have a skin that is seven thumbs thick. That means that he must be impervious to criticism and sniping.

A leader, either he or she, must look out for all the people, whether of the same home, clan, village, or nation. Above all, a

leader and a chiefly family must be thoughtful, looking ahead to consider the needs of others before their own. He must do more than plan ahead, he must look through the eyes of others to see what their needs might be in the future and arrange some means for people to have these needs met without having to ask or beg. Only the worst of leaders would have to have his people ask for satisfaction or comforts.

The Americas had many types of leaders in 1492. Men and women had their own spokesmen or spokeswomen. Every task had its own leader with the personal experience, along with the blessing of a spirit, needed to undertake such management. Whether it was leading a bison drive, netting birds or rabbits, conducting a ritual, delivering a baby, or trading with strangers; each of these tasks required a leader with supernatural sanction and proven ability. Lack of success gave cause for doubt; continued failure created a crisis that ended when people "voted with their feet" and deserted the would-be leader.

Most upstarts could not stand the constant scrutiny and criticisms that were a community's check on leaders. Children raised to the mantle had the best chance of surviving in the role because they learned from earliest times the need to think in widely embracing terms that their family was more than the ties of their household. The family of a leader was the world. The pettiness of any single individual was submerged into the ocean of responsibility that went with leadership.

Every member of a chiefly family had this all-embracing outlook and dedication. The leader was never a single individual. Leadership was, at least, a partnership, and, at most, a family corporation. Nor was membership in this burdensome elite limited to ties of hereditary. The best man or woman could aspire to any role in society, provided they had the necessary confidence, family backing, and divine sanction. It was a difficult combination to achieve, but it was not impossible.

Among both the Aztec and the tribes of the North Pacific, such remarkable individuals who rose above their station were known as "Eagles" because they had flown so high. The metaphor did not mean that they were that far above people; far from it. To be an Eagle was to see far and to know what to look forward to order to help people. To be above was to be ever on the watch for the welfare of others. Similarly, to rise so high meant that any fall would be most precipitous. Communal welfare meant that the needs of the many outweighed the needs of a few, allowing for larger issues of personal demand and cosmic balance.

As I began the discussion in the hallowed halls of the Field Museum, let me end here at the Newberry in the west gallery with a discussion of a single object that has received much admiration during this exhibition. I refer to the intricately woven harpooner's hat from Nootka Sound on the west coast of Vancouver Island. Beginning as a piece of raingear, it evolved over time into a symbol of high office among the people variously known through time as the AtH, Nootka, and, by their own legislation,

and Nuchanuth. In addition to being a fine example of tribal art, this hat is also a profound symbol of connectedness. It was not simply a head covering.

Traditionally, important men in this society included those who supernaturally brought in drift whales to outer beaches by conducting rituals at remote shrines filled with carved wooden figures and the bones and skulls of ancestors.

More vivid still were those leaders (hawil) who actively hunted whales and had the elite privilege of harpooning them. This was no simple task when you realize that harpoons were upwards of eighteen feet long and were thrown with the naked arm.

Clearly, a great deal of training was involved. Every night for eight months (roughly November to April), such a man bathed in cold water, mortified his body, and prayed to the spirits of the four corners. He fasted and took emetics. He and his wives slept apart the entire time.

For four months, he nightly entered fresh water, rubbing his body with stinging nettles and herbs before sinking into the water and staying under for as long as possible. When he could endure no more, he came out, put on a bearskin robe, and walked slowly and ponderously everywhere so the whale would also be generally inert.

For the last four months, he bathed in the sea or salt water, submerging slowly and sometimes spewing at the surface like a whale sounding. He would "blow" four times and then float on the surface, making every effort to identify with the whale.

He always swam in circles, moving counterclockwise. After four turns, he came to shore and rubbed his body with nettles, and then in slimy seaweed. To make sure of whaling success, he might also swim out to a rock or reef covered with barnacles and drag himself over it to intensify his prayers.

As the time for the whale migration approached, the crew of his whaling canoe also fasted, prayed, bathed, and slept alone, but were less rigorous than the harpooner.

Finally, whales were spotted off the coast and the crew left the village. During the actual hunt, the harpooner's wife had an important role. Both she and the whale were addressed as noble lady or "queen" (haquma). She was herself equated with the whale; their every act was believed to match. If she moved, the whale was restless.

Instead, she lay very still on her bed, covered with freshly made mats. Sometimes a slug was put on top of the mats to suggest the slow and deliberate pace that both whale and woman should keep.

When the whale was struck, a member of the crew jumped overboard and lanced the jaws together so the mouth would not open, take in water, and cause the whale to sink. Then the whale was towed to shore while a special song was sung.

The wife and villagers came down to the shore to meet the whale, hauling it into the shallows. The harpooner stood well away from the activity; he never ate oil or blubber from whales he had killed. The whale was his gift to his people. For him to have eaten of it would have been a selfish act.

The dorsal fin (or saddle) was cut off and carried ashore. Led by the wife, it was taken into the home of the harpooner, where it was welcomed inside and adorned with dyed cedar bark and down. A small canoe sat under the rack to collect the oil that dripped out. For four nights, the harpooner, wife, and crew gathered around the haunch and sang songs in honor of the fin. (Apparently the fin was the most identifying characteristic of each whale. According to native belief, the fin of a whale was like the face of a human.) For these same four days, husband and wife drank only fresh spring water and ate food cooked by a relative.

At the end of four days, the crew came in gala dress and cedar bark headbands, their chins painted red. Two men cut the fin into finger wide strips six inches thick and long enough to reach the ground when a man squatted. No one was to be comfortable during the feast in order to show that whale hunting was not easy. Songs and gestures accompanied all activities.

The strips were boiled in a wooden box with heated stones. When cooked, the guests sang in praise of the whaler and each received a strip, which he ate squatting. Men tried to eat as much as they could, with four pieces being the ideal. All of the blubber had to be consumed there and then; nothing could be taken home. Old women past menopause ate whatever remained.

The oil in the small canoe was specially saved in sea lion bladders for use during winter feasts² when everyone in the village acted as host to friends and strangers. The harpooner, in

particular, appeared at each event wearing his finest robe and woven hat.

At such times, society became a reality as everyone shared with each other and communal welfare held sway. In a few instances, however, particular needs or personal determination might determine a change of plans, but only because Native American societies recognized that life thrived on variety not on sameness. Respect for uniqueness was a hallmark of the Americas.

Delight in diversity has provided a moral strength that has carried Indians through to the present. Any comparison between tribes and modern states, economies, and societies with their emphasis on uniformity (on "little boxes" for everyone), modern commercial society appears disadvantaged. Variety has sustained native societies into the present and impressed every sensitive human who has ever lived or been accepted into an Indian household. The survival of tribal cultures in 1492 or in 1992 is directly related to the ability of native peoples to say, in the fullest sense of the term, "I am a very rich person; I have many relatives."

Endnotes

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The Arts in America in 1492

by
Charlotte Heth

The artists in America in 1492 used visible and invisible forms to honor, preserve, exalt, and commemorate their universe. They adapted their arts for large and small spaces, long and short distances, hard and soft surfaces, loud and soft ceremonies, and used both flagrant and subtle movements. In picturing everyday life without air or noise pollution, we can imagine ourselves in another world. Some of us today escape to mountains or deserts in trying to recapture some of this pre-Columbian essence. But visualize what it was like to see the stars without the interference of light or smog; to be surrounded with thousands of species of birds, animals, and plants; to see great distances; to know the everyday wonder of discovery. In bringing you a sense of the arts in 1492, I can give only a few examples to stimulate your curiosity. Some are clearly pre-Columbian, but I have chosen a few to illustrate first contact or continuity of an art form into today's world. As an ethnomusicologist, I will emphasize music and dance contexts over other art forms.

In looking for archaeological evidence of music and dance, we find many instruments and depictions of music and dance in pottery. Because their materials of manufacture (skin, wood, gourds, turtle shells, etc.) decay more rapidly, drums and rattles are less easy to document until after European contact when diaries and drawings by explorers gave us detailed descriptions.

In North America the first pictures and diaries that offer enough detail for music and dance interpretation came from the Roanoke colony in what is now North Carolina. On April 27, 1584 Walter Raleigh's explorers, under charter of Queen Elizabeth, left England for the voyage to America. Master Philip Amadas was aboard the flagship of the two-vessel fleet, and appears to have been in overall command. Master Arthur Barlowe, captain of the second and smaller vessel, was responsible for keeping an accurate record of where they went and what they saw and for preparing a detailed report for Raleigh upon their return to England.¹

In July they made friendly contact with the local Carolina Algonkians leading Barlowe to remark that the Native Indians were "Very handsom, and goodly people, and in their behaviour as mannerly, and civill, as any of Europe."²

The Roanoke Voyages and colonizing experiments of the years 1584-1590 were the first to bring English men, women, and children to settle in any part of North America. Quinn points out:

Each society expected too much from the other. The English anticipated at first that the Native Americans could go on producing food--corn, fish, and game--throughout the year for their support without any deep understanding of the fragile and cyclical nature of the native economy. From the Indians' perspective a glut of copper, of glittering ornaments, even the much more important iron tools and weapons did not in the long run compensate for the demands of the strangers for

continuous supplies of good. The first colony on Roanoke Island was to find that, whatever its attempts to remain on reasonably good terms with the native people, these deteriorated almost inevitably in fact of the demands that the settlers made; and hostility, the use of force on both sides, soured a relationship between the settlers and many, though not all, of the peoples among whom they had come to dwell. Thus, in June, 1586, when Sir Francis Drake removed the settlers who had arrived with such optimistic hopes the previous July, much of the mutual goodwill and cooperation between the two peoples had been used up, and it was time for the settlers to leave as most of them wished to do.³

Although these colonizing attempts failed, we did gain firsthand information about Indians and Englishmen of the period from the narratives that Richard Hakluyt collected, from the drawings of John White, and from other less sympathetic writers. As Quinn further observes:

The careful and immensely detailed record of this villages, their setting, their buildings, their ceremonial structures, their crops growing in garden fields, and the pleasant, lively, detailed figures of individuals are something quite new in European observation of the peoples of America.

The main body of White's surviving drawings of people and of their social and economic activity derives from his residence

on Roanoke Island, and from them we learn to know men, women, and children... We watch them eating, listening to tales told by a shaman around the fire; we can follow in part the intricate dance pattern of the green-corn festival. We do not see Indians as savages but as recognizable and knowable human beings.'

I want to pose two questions: "What can we learn about music and dance among the Carolina Algonkians?" and "Why would we want to reconstruct this music?" As an intellectual exercise, the historical reconstruction of any body of music and dance as a reflection of its people is worthwhile, in answer to the second question. The answer to the first question comprises part of this talk. Because music is not as easy as some other cultural phenomena for a layman, such as a soldier or traveler, to describe, ethnomusicology lacks the time depth contained in the use of most historical documents. We have no early sound recordings of the tribes still in the North Carolina area except for those more inland tribes the Cherokee and Catawba. Indeed, recordings were not even possible until the 1880's. The Library of Congress has samples of the early Catawba recordings in its collection, but the scratchy, low-fidelity quality of these historical recordings makes it difficult for us to glean important information from them.

Some of the other Eastern tribes, such as the Algonkian-speaking Delaware, had some of their songs and ceremonies recorded early in this century after they had been removed to Indian

Territory (now Oklahoma). Speck did a particularly good job of recording music of the Creek and Yuchi tribes, who once lived in the Southeast, again in Indian Territory, in 1905. Still, all of these sources are more than 300 years after Roanoak.

Using Fenton's ethnohistorical method of "upstreaming" we can "work back from cultural knowns of the present to the unknown past." We can generalize fairly easily about the characteristics of Eastern and Southeastern music and dance today.

1. Dances are performed in a counter-clockwise manner, for the most part.
2. Instruments are either worn on the body, held in the hand and shaken, blown, or beaten upon. The primary drum was and is the water drum.
3. Singing is either responsorial with leader-chorus alternation, or is unison chorus after the leader has "lined out" the beginning of the song. Strophic songs with alternating chorus and verse parts are also common.
4. Yells, animal cries, and parlando formulas occur at important structural points in the songs and are not merely expressing the exuberance of the dancers and singers.
5. Songs tend to be short, while performances are long, have many repetitions, and/or are arranged in cycles.
6. Ritual Speech appears to have a song-like character when heard by outsiders.

7. Sacred numbers, colors, and other symbols are important in playing out the songs and dances. For example, songs may be repeated four or seven times (or multiples thereof), colors and directions may be mentioned in a specific order (denoting counter-clockwise motion, etc.)

Now we can examine the historical record for evidence of these characteristics of music and dance. John White, the artist, was later also governor of the colonists at Roanoke in 1587. However, his and Thomas Harriot's travels, notes, and sketches from 1585 and 1586 (published in 1588) are of more interest to us here than are his politics. The first water color of White's that I will show portrays dance. [For reproduction of this water color see Stephan Lorant, The New World: The First Pictures of America (New York: Duell, Sloan and Pearce, 1965), pp. 196-97].

A caption for the image reproduced in Lorant indicates "A Religious Dance":

Seventeen Indians--of whom seven are women dancing around seven posts, the tops of which are carved in the form of human heads. Harriot wrote that at certain times of the year a dance was held by the villagers at night to which visitors came from the neighboring towns. The place of the dance was probably Secoton.⁵

One woman holds a gourd; three others are decorated with or are holding branches; three women in the center are holding each

other tightly while dancing around a center pole with a head carved on it. There are seven gourds in evidence counting the one held by the woman. The other men hold a combination of gourds, branches, and spears. A dance appears to be in progress with large body movements, and some beating on the posts with the branches. All but the center girls and the woman decorated with branches have one foot high off the ground. Another woman holding both a branch and a gourd has one foot only slightly raised, and is touching hands with the woman decorated with branches.

Thomas Harriot gives a lively representation of a public dance in a slightly different way:

the occasion a great and solemn feast, to which the inhabitants of neighboring towns had been invited--the place, a level spot in the midst of a broad plain, circular in shape, about which are planted in the ground posts 'carved with heads like to the faces of nonnes covered with theyr vayles,' the centre being occupied by 'three of the fayrest Virgins of the companie, which imbrassing one another, doe, as yt wear, turne abowt in their dancings.' Around these, and following the line of the posts, fancifully attired and bearing in their hands the branches of trees and gourd-rattles, with which they keep time by striking them against the posts, are wildly singing and dancing in the cool of the evening, the natives assembled for the celebration of this solemne feasts." . . .⁶

Harriot goes on to explain the reasons why he thought the various dances were held:

Many of these dances were of a purely social character, and were participated in every night by way of amusement. Others were designed, by violent exercise, to prepare the actors "to endure fatigue, and improve their wind." Others still were had in commemoration of war, of peace and of hunting; others in the early spring when the seed was sown, others when the harvest was ended; others--wild and terrible--in presence of captured victims doomed to torture and death; while others, with slow and solemn movement and carefully-observed ceremonies, were conducted in honor of some religious festival. There was scarce an occurrence of note, or a convocation of moment which did not receive commemoration by a dance. Every occasion was provocative of this amusement.'

Illustration #2 shows the place of this dance within the village of Secoton. [See Lorient, p. 191]

DeBry's caption for the engraving of the Town of Secota, in his publication of Harriot's (a.k.a. Harriot's) report includes the following about dance:

They also have a large plot where they meet with neighbors to celebrate solemn feasts, and a place where they make merry when the feast is ended. In the round plot they assemble to pray.⁸

The caption to this DeBry engraving, "Sitting Around the Fire" [see Lorant, p. 192] gives yet another context for music:

When they have escaped some great danger on sea or land, or have returned safely from the wars, they light a great fire to celebrate. Men and women sit around it, each of them holding a rattle made of a certain kind of gourd, from which the fruit and seeds have been removed and replaced with small stones or kernels. These gourds they fasten to sticks and shake as they sing and make merry.⁹

Looking more closely, we can see that the fire has seven logs. There are five gourd rattles; three are held by men and two by women. There are four men and four women around the fire while another man and woman are watching. There are no other instruments, and the scene appears rather informal. We see this scene reproduced again within the "Village of Pomeiock."

For the next engraving [Lorant, p. 262], DeBry states:

Feasts and celebrations are held in the middle of the town. If the place is far from the water, they dig a pool from which they fetch all the water they need.¹⁰

Here people are kneeling or sitting around the fire in the center, shaking gourd rattles.

For the most part, Theodore DeBry's engravings of the White watercolors were faithful. This last illustration [Lorant, p. 189] shows some license in adding fishing scenes, bystanders, and the like.

Now that we have an idea of how the people looked while they were signing and dancing, we have to look into later sources for more details on the music itself. In 1609 Strachey describes responsorial singing in Virginia mentioning a short groan by "the rest of the priests" at pauses in the invocation of the Chief Priest.¹¹ One can still observe these responses and groans in the music and oratory of the Delawares, Cherokees, Shawnees, and many other formerly Eastern tribes.

Strachey goes on to describe:

the manner of . . . devotion is sometymes to make a great fier in the howse of feildes, and all to sing and dance about yt in a ring with rattles and showtes, 4 or 5 howers together, sometymes fashioning themselves in twoo Companies, keeping a great circuyt, one Company daunceth one waie and the other the contrary, (all very fynely paynted, certayne men going befor with either of them a Rattle, other following in the midst, and the rest of the trayne of both wings in order 4 and 4 and in the Reare certayne of the Chiefest young men with long

Switches in their handes to keepe them in their places: after all which followes the Governour or Weroance himself in a more slowe or sollemne measure, stopping and dauncing, and all singing very tunable.¹²

This kind of activity is still seen in the Green Corn dances of the Southeastern tribes today. Strachey says that purely instrumental music has:

Among other 'sondry Instruments . . . a kynd of Cane on which they pipe as on a Recorder . . . being hardly to be sounded without great strayning of the breath, upon which they observe certain rude tunes.'¹³

On Aesthetics of music Strachey remarked:

So akin were dance and song in the mind of the aboriginal Virginian that the word for song--cante-cante--and for dance were the same.¹⁴

The first English critic of music and dance seems to have been Captain John Smith who published his observations in 1624. In describing a meeting between Indians and Englishmen, he said:

With a hellish voice and a rattle in his hand . . . With most strange gestures and passions, he began his invocation, and environed the fire with a circle of meal; which done, three

more such like devils came rushing in with the like antique tricks, painted half black, half red; but all their eyes were painted white, and some red strokes . . . along their cheeks; round about him those friends danced a pretty while, and then came in three more as ugly as the rest; with red eyes, and white strokes over their black faces, at last they all sat down right against him; three of them on the one hand of the chief priest, and three on the other. Then all with their rattles began a song, which ended, the chief priest laid down five wheat corns: then straining his arms and hands with such violence that he sweat and his veins swelled, he began a short oration: at the conclusion they all gave a short groan; and then laid down three grains more. After that, began their song again, and then another oration, every laying down so many corns as before, till they had twice incircled the fire; that done, they took a bunch of little sticks prepared for that purpose, continuing still their devotion, and at the end of every song and oration, they laid down a stock between the divisions of corn. Till night, neither he nor they did either eat or drink, and they feasted merrily, with the best provisions they could make. Three days they used this ceremony; the meaning whereof they told him was to know if he intended them well or not.¹⁵

Later he describes a woman's dance:

These Fiends with most Hellish Shouts and Cries, rushing from among the Trees, cast themselves in a Ring about the Fire, Singing and Dancing with most excellent ill variety, oft falling into their infernal passions, and then solemnly betaking themselves again to Sing and Dance; having spent near an hour in this Mascarado, as the enter'd, in like manner they departed.¹⁶

In 1705 Beverly speaks of "antic Indian dances performed both by men and women and accompanied with a great variety of wild music." He goes on to say:

Their singing is not the most charming that I have heard. It consists much in exalting the voice and is full of slow melancholy accents. However, I must allow even this music to contain some wild notes that are agreeable.¹⁷

Their dancing is performed wither by few or a great company, but without much regard either to time or figure. The first of these is by one or two persons or at most by three. In the meanwhile, the company sit about them in a ring, upon the ground singing outrageously and shaking their rattles. The dancers sometimes sing, and sometimes look menacing and terrible, beating their feet furiously against the ground and showing ten thousand grimaces and distortions. The other is performed by a great number of people, the dancers themselves

forming a ring, and moving round a circle of carved posts that are set up for that purpose, or else around a fire made in a convenient part of the town; and then each has his rattle in his hand or what other thing he fancies most, as his bow and arrows or his tomahawk. They also dress themselves up with branches of trees or some other strange accoutrements. Thus they proceed, dancing and singing with all the antic postures they can invent; and he's the bravest fellow that has the most prodigious gestures.

They have a fire made constantly every night at a convenient place in the town, whiter all that have a mind to be merry at the public dance or music resort in the evening.

Their musical instruments are chiefly drums and rattles. Their drums are made of a skin stretched over an earthen pot half full of water. Their rattles are the shell of a small gourd or macock of the creeping king . . .¹⁸

These early reports from Carolina and Virginia show consistent ceremonial practices along the Eastern seaboard for a span of 125 years. Current practice among Eastern and Southeastern tribes today bear many similarities too numerous to mention today. Perhaps reconstructing the music of Roanoak would not be so difficult as one might have imagined.

Unique to North America is the water drum. Originally a clay pot or hollowed log, covered with the skin of a small animal, the singer tunes it by adding or subtracting water and by stretching the wet head and securing it with either a hoop or tie. Nowadays it is used from the Northeast to the Southwest and everywhere the peyote religion (or Native American Church) is practiced.

Animals, birds, and shellfish provided materials for musical instruments and ceremonial dress. Rattles made of deer hoofs, turtle shells, and cocoons were widespread as were those of shells in the coastal areas. Even the personal adornment of the dancers such as necklaces and dresses were supposed to furnish rhythmic accompaniment to the songs.

Where there was little wood, rawhide rattles were made, and gourds were cultivated for their utility as well as for making musical instruments. Baskets served utilitarian, decorative, and ceremonial purposes and were sometimes made into musical instruments. A basket rattle from the Hopi illustrates one use, and a basket dance at San Juan Pueblo features baskets serving as resonators for notched stick rasps.

Where wood was abundant, such as the Northwest Coastal area of North America, elaborate wooden rattles and masks were carved to represent ancient stories of creation, guardian spirits, and representations of everyday life. The carved hat is for protection both spiritual and practical.

When animals were harder to kill, before Indians could hunt on horseback with metal spears or guns, large hides were hard to

get for making drum heads. Smaller hand-held drums, often several playing at one time served as accompanying instruments to the voice and the dance. Many of these decorated and plain frame drums have survived in museum collections for the past two centuries.

Chilkat blankets, woven of mountain sheep wool and dyed with natural dyes are highly prized as museum artifacts. however, when you see them move on the dancers, they suddenly come to life.

The carvers of the large hueheutls and teponaztles of Mexico and Guatemala displayed an artistry with their metal tools. The sounds of the instruments reflect musical art.

Personal adornment, although sometimes to express beauty, also served ritual purposes. In Venezuela, rattles and hollow, struck idiophones serve as a shaman's musical implements for curing.

Ceramic, wooden, and cane flutes were widespread in the Americas; they were double, single, and multiple, like pan pipes. Some were anthropomorphic or zoomorphic, and some contained water to sound like birds. A few were extremely long and played in concert. In the 20th century, musicians still play them throughout the Americas.

In the category of wind instruments the bullroarer, which survives in popular culture as a child's toy, is still used today for ritual and ceremonial events. A segmented bamboo trumpet from South America plays a distinct, celebratory melody.

The Apache fiddle (made from a mescal stalk) and musical bows are examples of early string instruments, although pre-Columbian evidence is difficult to find for these. Given the rapid adoption

and adaptation of stringed instruments such as guitars, fiddles, and the like, either a few strings existed in the past, or the novelty was too appealing to resist.

Indians of the Americas, who have been dancing, playing, and singing music, performing speeches and ceremonies, and carving and painting walls, ornaments, and everyday household items, have exhibited group and individual artistry for many centuries.s They continue to do so in 1992.

Endnotes

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Contributors

Sam D. Gill is a professor of religion at the University of Colorado, Boulder. Among his books are Songs of Life: An Introduction to Navajo Religious Culture; Sacred Words: A Study of Navajo Religion and Prayer; and Native American Religious Action.

Charlotte Heth, a member of Cherokee tribe of Oklahoma, is professor of anthropology at the University of California, Los Angeles. Dr. Heth is author (with Susan Guyette) of Issues for the Future of American Indian Studies and editor of Native American Dance: Ceremonies and Social Traditions, recently published by the National Museum of the American Indian.

Frederick E. Hoxie is director of the D'Arcy McNickle Center for the History of the American Indian at the Newberry Library in Chicago. He is the author of several books, including A Final Promise: The Campaign to Assimilate the Indians, 1880-1920, and editor of Indians in American History: An Introduction. He is former associate professor of history at Antioch College.

Francis Jennings is director emeritus of the D'Arcy McNickle Center for the History of the American Indian and a past president of the American Society for Ethnohistory. He has also served on the executive boards of the Organization of American Historians and the Pennsylvania Historical Society. Dr. Jennings is the author of The Invasion of America; the Covenant Chain Trilogy, of which the most recent volume is Empire of Fortune: Crowns, Colonies, and Tribes in the Seven Years War in America; and the forthcoming The Founders of America.

Clara Sue Kidwell, a member of the Choctaw and Chippewa tribes, is associate professor of Native American studies at the University of California, Berkeley. Having concentrated her teaching and research on American Indians since 1970, she is presently completing a book on the Choctaw Indians in Mississippi.

Alan Kolata is associate professor in the Department of Anthropology, the University of Chicago. His major academic research interests are pre-industrial urbanism, pre-Hispanic architecture, and the history of agricultural technology in Mesoamerica and South America. The author of many articles and essays, Dr. Kolata is author of a forthcoming book, An Architectural and Social History of Chan Chan, Peru.

Jay Miller is a former editor and assistant director of the D'Arcy McNickle Center for the History of the American Indian. His specialty is the cultures of Native North America. He has done fieldwork among the Pueblo, Delaware, Tsimshian, Salish, Numic, Creek and Caddo Indians. Among his numerous publications is Shamanic Odyssey: The Lushootseed Salish Journey to the Land of the Dead. He also served as principal consultant for The Spirit World,

the second volume of Time-Life Book Inc.'s new series on Native Americans.

Dean R. Snow is professor of anthropology at the State University of New York, Albany. He is the author of The American Indian: Their Archaeology and Prehistory and Native American Prehistory: A Critical Bibliography and co-editor of The Atlas of Ancient America.

William R. Swagerty is assistant professor of History at the University of Idaho, Moscow. He is the author of many articles on Indian-white relations in early North America and editor of Scholars and the Indian Experience.